Supreme Court, U.S.
FILED

(2) No. _____

03 180 JUL 24 2003

OFFICE OF THE CLERK

In The Supreme Court of the United States

FRANCES BROADDUS CRUTCHFIELD

and

HENRY RUFFIN BROADDUS,

Petitioners,

v.

UNITED STATES ARMY CORPS OF ENGINEERS

and

COUNTY OF HANOVER, VIRGINIA,

Respondents.

On Petition for Writ of Certiorari to the United States Court of Appeals for the Fourth Circuit

---

Appendix to Petition for Writ of Certiorari

William B. Ellis
1406 Confederate Avenue
Richmond, Virginia 23227
(804) 355-4043

Counsel of Record for Petitioners

LANTAGNE LEGAL PRINTING
801 East Main Street Suite 100 Richmond, Virginia 23219 (800) 847-0477

316 pp

TABLE OF CONTENTS

Materials Required by Rule 14(1)(i)(i)

Crutchfield v. County of Hanover, 325 F.3d 211 (4th Cir. 2003) 1

Materials Required by Rule 14(1)(i)(ii)

Crutchfield v. U.S. Army Corps of Engineers, 214 F. Supp. 2d 593 (E.D. Va. 2002) 27

Memorandum for the Record, April 4, 2002, Pamela K. Painter, U.S. Army Corps of Engineers 152

Materials Required by Rule 14(1)(i)(iii)

Crutchfield v. County of Hanover, Denial of Petition for Rehearing and Rehearing En Banc, Record Nos. 02-1946 and 02-2153 (4th Cir., Filed April 25, 2003) 256

Materials Required by Rule 14(1)(i)(v)

Section 706 of the Administrative Procedure Act, 5 U.S.C. § 706 259

Materials Required by Rule 14(1)(i)(vi)

Crutchfield v. U.S. Army Corps of Engineers, 154 F. Supp. 2d 878 (E.D. Va. 2001) 260

325 F.3d 211
56 ERC 1014
(Cite as: 325 F.3d 211)

United States Court of Appeals,
Fourth Circuit.

FRANCES BROADDUS CRUTCHFIELD; Henry Ruffin Broaddus, Plaintiffs-Appellees,
v.
COUNTY OF HANOVER, VIRGINIA, Defendant-Appellant,
and
United States Army Corps of Engineers, Defendant.
Greater Richmond Partnership, Incorporated; Greater Richmond Chamber of
Commerce; Hanover Business Council; Local Government Attorneys of Virginia,
Incorporated; Virginia Association of Counties; Virginia Association of
Municipal Wastewater Agencies, Incorporated (VAMWA), Amici Supporting
Appellant.
Frances Broaddus Crutchfield; Henry Ruffin Broaddus, Plaintiffs-Appellees,
v.
United States Army Corps of Engineers, Defendant-Appellant,
and
County of Hanover, Virginia, Defendant.
Greater Richmond Partnership, Incorporated; Greater Richmond Chamber of
Commerce; Hanover Business Council; Local Government Attorneys of Virginia,
Incorporated; Virginia Association of Counties; Virginia

Association of
Municipal Wastewater Agencies, Incorporated (VAMWA),
Amici Supporting
Appellant.

Nos. 02-1946, 02-2153.

Argued: Jan. 24, 2003.
Decided: March 27, 2003.

Before WILKINSON and MICHAEL, Circuit Judges, and MICHAEL, Senior United District Judge for the Western District of Virginia, sitting by designation.

Reversed by published opinion. Judge WILKINSON wrote the opinion, in which Judge MICHAEL and Senior Judge MICHAEL, joined.

OPINION

WILKINSON, Circuit Judge:

Plaintiffs Frances Crutchfield and Henry Broaddus brought suit against the United States Army Corps of Engineers and the County of Hanover, Virginia to enjoin the construction of a wastewater treatment plant and its associated sewage conveyance systems and to strike down the Army Corps' approval of those facilities. The district court upheld their challenge. *Crutchfield v. United States Army Corps of Eng'rs,* 214 F.Supp.2d 593 (E.D.Va.2002). Because the Army Corps is entitled to approve an applicant's project proposal under a less stringent Nationwide Permit regime even if the applicant initially requested a type of individual

permit that would have required more rigorous review, and because there was sufficient evidence to support the Army Corps' decision to approve the project, we reverse.

***214** I.

Hanover County is located in a rapidly-growing area north of Richmond, Virginia. In an effort to manage this growth and preserve some of the rural character of the region, county government has adopted a "Smart Growth" policy that concentrates development in a limited portion of the County known as the "Suburban Service Area." However, this rapid population growth has put significant pressure on the County's wastewater treatment infrastructure.

The County currently satisfies its need for wastewater treatment by using two of its own wastewater treatment facilities to process sewage from the northern part of the Suburban Service Area, and by sending sewage from the southern part to neighboring Henrico County for treatment and discharge. The contract with Henrico County allows Hanover County to send up to 5.4 million gallons per day (mgd) of wastewater for treatment at a Henrico County facility. Because it appears that Henrico County is unwilling to satisfy Hanover County's wastewater treatment needs beyond this contractual limit, Hanover County needs to develop supplementary means of treating wastewater generated by its continuing population growth.

After evaluating various options for dealing with this challenge, Hanover County decided to build its own wastewater treatment plant. The current proposal for that plant consists of (1) a pump station and a four-mile forcemain (collectively the "Lee Davis pipeline") which would convey wastewater from the pump station to the

treatment site, (2) the wastewater treatment plant itself, (3) an eight-mile forcemain which would convey treated wastewater from the plant to the Pamunkey River, and (4) a discharge structure on the river bottom.

The project would permanently affect no more than two tenths of an acre of wetlands. Plaintiffs own approximately 900 acres of farm-land adjacent to the Pamunkey River. Their land would be crossed by one of the forcemains, and the Pamunkey River discharge structure would be located adjacent to their property. They oppose the project and have filed numerous court challenges against it.

Because the project involves the placement of "dredged or fill material" in wetlands, Hanover County must get clearance from the Army Corps of Engineers before beginning construction. 33 U.S.C. § 1344(a) (2003). There are two different methods of obtaining Army Corps clearance for a project. First, the Corps can issue individual permits on a case-by-case basis. This requires a resource-intensive review that entails submission of voluminous application materials, extensive site-specific research and documentation, promulgation of public notice, opportunity for public comment, consultation with other federal agencies, and a formal analysis justifying the ultimate decision to issue or refuse the permit. *See* 33 C.F.R. §§ 320.4, 325.1-325.3 (2003). Alternatively, interested parties can try to fit their pro-posed activity within the scope of an existing general permit, which acts as a standing authorization for developers to undertake an entire category of activities deemed to create only minimal environmental impact. 33 U.S.C. § 1344(e) (2003); 33 C.F.R. §§ 320.1(c), 330.1(b)-(c) (2003).

The general permits at issue in this case are all Nationwide Permits (NWPs). Activities falling within the scope of an

NWP are automatically authorized without any individualized inquiry, although preconstruction notification of the Corps is required in some cases. 33 C.F.R. § 330.1(e) (2003). In cases where preconstruction notification is required, the ***215** Corps will verify the applicability of the NWP to the proposed activity. 33 C.F.R. § 330.1(e)(2). Since NWPs are "designed to regulate with little, if any, delay or paperwork certain activities having minimal [environmental] impacts," NWP verification is much simpler than the individual permit process. 33 C.F.R. § 330.1(b) (2003). If the Corps has concerns about a proposed project, however, the Corps may exercise "discretionary authority" to restrict the other-wise automatic application of the NWP program while its concerns are addressed. 33 C.F.R. §§ 330.1(d), 330.5 (2003). The Corps' regulations also direct the Corps to review any incoming individual permit application for potential eligibility under existing NWPs, even if the application itself does not so request. 33 C.F.R. § 330.1(f) (2003).

The current proposal is Hanover County's second major effort in recent years to develop infrastructure to support its "Smart Growth" policy. Originally, Hanover County submitted a significantly different proposal to the Army Corps for the new wastewater treatment plant. That draft of the project did not include the Lee Davis pipeline. Rather, under that proposal, wastewater would have been delivered to the new plant via a 5.6-mile pipeline called the Totopotomoy Creek Interceptor. An initial review by the Army Corps concluded that the Interceptor was the only element of the project that would have more than minimal impact on wetlands. The Corps therefore issued NWP verifications for all elements of the project except for the Interceptor (i.e., the treatment plant, the discharge forcemain, and the Pamunkey River discharge structure) and began to

review the Interceptor as part of a separate application for an individual permit.

Plaintiffs brought suit in federal court challenging the NWP verifications. They argued that the County was attempting to improperly segment the Interceptor from the rest of the project and thereby evade the full measure of required regulatory scrutiny. Because the Interceptor was the only way to bring wastewater to the plant for treatment, the district court agreed. It vacated the verifications, enjoined further construction of the planned infrastructure, and ordered the Corps to consider the various project elements as an integrated whole. *Crutchfield v. United States Army Corps of Eng'rs,* 154 F.Supp.2d 878 (E.D.Va.2001) (remanding to Army Corps for reconsideration of the wastewater treatment project as a whole); *Crutchfield v. United States Army Corps of Eng'rs,* 192 F.Supp.2d 444 (E.D.Va.2001) (enjoining further construction on wastewater treatment project); *Crutchfield v. United States Army Corps of Eng'rs,* 175 F.Supp.2d 835 (E.D.Va.2001) (maintaining injunction against further plant construction).

After those rulings, Hanover County made substantial changes to the planned project and submitted a revised permit application to the Corps. The Totopotomoy Creek Interceptor, which had been the principal focus of plaintiffs' original complaint, was dropped from the application. The newly proposed Lee Davis pipeline was presented as a fully functional replacement for the Interceptor, with wastewater flow capacity comparable to that of the Interceptor. Where the Interceptor would have permanently impacted 3.84 acres of wetlands, however, the Lee Davis pipeline (which runs through a different part of the County) is expected to impact only 30 square feet of wetlands. Hanover County has apparently dropped all plans to construct the Interceptor at

any time in the foreseeable future. The Interceptor has been eliminated entirely from the Army Corps application, as well as from Hanover County's Capital Improvement ***216** Plan. Plans to construct a pump station necessary for the Interceptor have been abandoned, and the county has ceased its efforts to obtain easements necessary to construct the Interceptor.

The Army Corps assigned new staff with no previous involvement in the project to review the County's revised application. The Corps initially planned to process the application through the individual permit process rather than through the NWP verification process, and informed both the County and the Court of this intention. It determined that the revised application included all "reasonably related" activities, as required for individual permit applications by 33 C.F.R. § 325.1(d)(2), and it issued a public notice soliciting comments about the possible issuance of an individual permit. Over the next several months, continuing to act in accordance with the individual permitting procedure, the Corps received public comment, conducted several field visits, solicited feedback from other federal and state regulatory agencies, and continued to analyze whether the project as submitted represented another effort to improperly segment a larger project so as to avoid full environmental review. As the district court observed, none of this was necessary for verification under the NWP program.

Numerous state and federal agencies commented on the project, collectively concluding that the proposed construction would have no adverse impact on the environment, water quality, recreational facilities, scenic beauty, or historic resources of Virginia. The Virginia Department of Health advised the Corps that the water from

the discharge pipe would actually be cleaner than the water in the Pamunkey River, and that the treatment plant and discharge structure were "where [they] ought to be."

Plaintiffs maintained their objections to the project, however, charging that the application did not include all of the construction necessary for the project and therefore did not disclose all of the reasonably related activities planned by the County. Much of the dispute over this issue has focused on the volume of sewage that the project would process. Plaintiffs contended that, notwithstanding the capacity of the treatment plant itself, the new sewage associated by the County's rapid growth would be generated principally in areas not serviced by the Lee Davis pipeline. They therefore argued that the revised proposal would not substantially assist Hanover County in remaining under the cap of its wastewater processing contract with Henrico County.

Plaintiffs also pointed to a separate application by a private developer for a permit to extend a sewer line in connection with the intended construction of a multiuse development at Bell Creek. Plaintiffs argued that this private sewer line should have been included as part of the County's application. When the plans for the Bell Creek development had first been proposed to Hanover County, the private developer had assumed that the development's sewer lines would connect to the Interceptor. Since the Interceptor was not approved, however, the developer was forced to submit plans for extension of its sewer line to another spot in the county system. Plaintiffs noted that 2,200 feet of this 7,500-foot sewer line is slated to run along the 5.6-mile path of the formerly proposed Interceptor. After the sewer line is complete, it will be dedicated as a public sewer main and--if the wastewater treatment plant is completed-- divert sewage from the Bell Creek development to the new wastewater

treatment plant.

After reviewing these various contentions, the Corps determined that all activities *217 reasonably related to the project had been fully disclosed, and that the application presented a single and complete project. The Corps investigated plaintiffs' claim that the abandoned Interceptor would be built and found that their concerns were not credible. The Corps also concluded that the Bell Creek sewer extension could not properly be considered part of the wastewater treatment plant project. The Corps concluded that the sewer extension could not serve the function of the original Interceptor, in large part because the Bell Creek sewer extension is sized to serve the Bell Creek development and will have only forty percent of the capacity that the Interceptor would have had. The Corps further concluded that the revised project's impact on wetlands would be "minimal, both individually and cumulatively." It also found that the discharge of treated wastewater into the Pamunkey River would not damage the water quality in that river.

Based on these findings, the Corps verified four NWPs for the construction of Hanover County's revised wastewater treatment plant project in April 2002. The decision was accompanied by a 47-page memorandum and an administrative record of roughly 6,000 pages.

Plaintiffs appealed the new NWP verifications to the district court. They alleged that the revised application did not include all of the "reasonably related" means by which the County would deliver sew-age to the proposed plant in the future. They argued that if the Corps had considered other, properly related infrastructure plans, the environmental impact of the proposal would have been far greater, requiring evaluation of the application through the individual permit

process.

The district court applied rigorous scrutiny to the Army Corps' decision and held that the present project was not "single and complete." 214 F.Supp.2d at 651-52. The court held that the purpose of Hanover County's project was to "off-load[ ] enough sewage to allow it to remain within the 5.4 mgd limit of its contract with Henrico [County]." *Id.* at 629. The court then engaged in an independent mathematical calculation of projected wastewater flows and deter-mined that the proposed project was unlikely to enable Hanover County to stay within the contractual limits after 2005. *Id.* at 626 & nn. 42-43, 629- 31. The court therefore decided that other potential projects would have to come online to achieve the project's purpose, and that those projects should have been included in the Corps' analysis. *Id.* at 635-37. The court also held that there was strong evidence that the Bell Creek sewer was reasonably related to the revised project and should also have been included in the Corps' analysis. *Id.* at 632-35. Finally, the court held that the Corps had erred procedurally by abandoning the individual permit process and authorizing the project under the NWP program instead. *Id.* at 638. For all these reasons, the court concluded that the Corps' decision was arbitrary and capricious, set aside the NWP verification, and remanded to the Corps for reconsideration with numerous specific instructions. *Id.* at 654-55. This appeal ensued.

II.

Our review of the district court's decision in this case is de novo as to both law and fact, *Roanoke River Basin Ass'n v. Hudson,* 940 F.2d 58, 61 (4th Cir.1991), since the district court here stands in no better position than an appellate court in reviewing the administrative record. *MM v. School Dist.*

of Greenville County, 303 F.3d 523, 531 (4th Cir.2002).

Our concern with the district court's decision begins with the standard ***218** of review. Under the deferential standard established by the Administrative Procedure Act, federal courts can overturn an administrative agency's decision if it was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2) (2003). "Although our inquiry into the facts is to be searching and careful, this court is not empowered to substitute its judgment for that of the agency." *Hughes River Watershed Conservancy v. Johnson,* 165 F.3d 283, 288 (4th Cir.1999). Particularly with environmental statutes such as the Clean Water Act, the regulatory framework is exceedingly "complex and requires sophisticated evaluation of complicated data." *Trinity Am. Corp. v. EPA,* 150 F.3d 389, 395 (4th Cir.1998). We therefore do not "sit as a scientific body" in such cases, "meticulously reviewing all data under a laboratory microscope." *Natural Res. Def. Council, Inc. v. EPA,* 16 F.3d 1395, 1401 (4th Cir.1993). Rather, if the agency "fully and ably explain[s] its course of inquiry, its analysis, and its reasoning sufficiently enough for us to discern a rational connection between its decision-making process and its ultimate decision," we will let its decision stand. *Trinity Am. Corp.,* 150 F.3d at 395 (internal punctuation omitted).

A reviewing court must defer not only to an administrative agency's findings of fact but also to that agency's reasonable interpretations of governing law. If it is apparent that Congress would expect the agency "to speak with the force of law when it addresses ambiguity in [a] statute," a reviewing court must accept the agency's construction of that statute so long as it is "reasonable." *United States v. Mead Corp.,* 533 U.S. 218, 229, 121 S.Ct. 2164, 150 L.Ed.2d 292

(2001); *see generally Chevron U.S.A. Inc. v. Nat'l Res. Def. Council,* 467 U.S. 837, 842-45, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984). And courts must accept an agency's interpretation of its own regulations unless that interpretation is "plainly erroneous or inconsistent with the regulation." *Sigma-Tau Pharmaceuticals, Inc. v. Schwetz,* 288 F.3d 141, 146 (4th Cir.2002) (internal punctuation omitted).

Despite acknowledging the governing caselaw, the district court in this case declined to accord the necessary deference to the Army Corps' decision. Noting that the Corps' initial decision had been overturned as arbitrary and capricious, the district court asserted that the Corps' review of the second project had reached "virtually the same decision after judicial remand." 214 F.Supp.2d 593, 621 (citing *Natural Res. Def. Council, Inc. v. SEC,* 606 F.2d 1031, 1049 n. 23 (D.C.Cir.1979)). It therefore decided that the Corps' most recent decision should be assessed under "heightened scrutiny" and proceeded to engage in a highly exacting, essentially de novo examination of the record, repeatedly rejecting the Corps' conclusions and drawing its own independent inferences from the evidence. *Id.*

This was an erroneous approach that turned the Administrative Procedure Act on its head. In the first place, it is not true that the Corps reached virtually the same decision after the judicial remand. The County presented a substantially new proposal, eliminating the only problematic element from the prior proposal (the Interceptor) and replacing it with a completely different structure (the Lee Davis pipeline) located in a different part of the County. And whatever the district court thought of the Corps' reasoning process during its evaluation of the original proposal, it is uncontested that the Corps assigned new staff with no previous connection to the project to review the revised

proposal.

***219** The Corps' dedication to a credible decisionmaking process on remand was clear: it devoted more than five months to reviewing the application, engaged in an extensive and ongoing dialogue with the County, considered comments from at least eight other federal and state environmental and health agencies, and generated an administrative record of more than 6,000 pages. The district court thus erred initially by failing to accord the proper statutory deference to the Corps' decision.

III.

Plaintiffs' first major challenge to the Corps' decision is procedural. They argue that, because the Corps initially treated the County's proposal as an application for an individual permit, it was improper for the Corps to subsequently issue an NWP verification in place of an individual permit.

The district court pointed out, quite correctly, that the Corps began its evaluation of the revised application in accordance with the regulations applicable to individual permits. *Id.* at 638-39. But this did not render the Corps' eventual decision to approve the proposed project via NWP verification rather than an individual permit any less consistent with the Corps' mandate. The governing regulations specifically require the Corps to "review *all* incoming applications for individual permits for possible eligibility under ... NWPs." 33 C.F.R. § 330.1(f) (2003) (emphasis added). If any proposed activity "complies with the terms and conditions of one or more NWP," the Corps "should verify the authorization and so notify the applicant," even if the applicant never sought review under the easier approval process. *Id.* In fact, if an

application for an individual permit is even close to qualifying for an NWP, the regulation goes so far as to require the Corps to alert applicants to that fact and explain to them how they could modify the project to make it eligible for NWP verification. *Id.* The Corps' review of the County's application for eligibility under the NWP program was thus an essential part of the ordinary individual permit process. The Corps did no more by verifying the NWPs than what its regulations required it to do.

The district court held that § 330.1(f) could not justify the Corps' decision to switch to the NWP verification process because the Corps did not specifically cite to that regulation in its decision document. 214 F.Supp.2d at 643 (citing *SEC v. Chenery Corp.*, 332 U.S. 194, 196, 67 S.Ct. 1575, 91 L.Ed. 1995 (1947) (holding that the propriety of agency actions must be judged "solely by the grounds invoked by the agency," and that a reviewing court cannot affirm an agency's action "by substituting what it considers to be a more adequate or proper basis")). The district court therefore refused to accept what it termed a "classic post-hoc rationalization" for the agency's action. *Id.* at 645.

This characterization of § 330.1(f), however, misunderstands the nature of that regulation. "We are dealing here not with the reasoning by which an agency seeks to justify its actions, but with a pure question of law." *Indep. U.S. Tanker Owners Committee v. Skinner,* 884 F.2d 587, 591 (D.C.Cir.1989). The question is simply whether that regulation requires the Corps--as it did here--to review all incoming applications for NWP eligibility. *Cf. id.* (rejecting "post hoc rationalization" argument which was based on an agency's failure to cite regulatory authority in its final decision). As explained above, there is no question that the regulation does so require. Indeed, the County properly

points out that it is actually *entitled* to the mandatory NWP screening under § 330.1(f); even if it were so inclined, the ***220** Corps could scarcely withhold the benefits of that regulation from the County by the simple expedient of failing to cite to it. As a matter of law, then, the Corps simply acted in direct compliance with its governing regulations.

The district court held in the alternative that § 330.1(f) cannot support the Corps' decision because the Corps did not put interested parties on proper notice of the potential NWP verification. The court acknowledged that "notice and comment ordinarily is unnecessary where the Corps determines that a project may proceed under the authority of NWPs," and also that "no precise regulation mandates that the Corps must notify interested parties of a decision to switch from the individual permitting mode to the NWP mode." 214 F.Supp.2d at 644 n. 57. But the court argued that it was "unfair" for the Corps to mislead plaintiffs into believing that the County's application would be reviewed under the individual permitting process, because the Corps had realized early on that the revised proposal might qualify for an NWP verification. *Id.* at 644-45.

Once again, however, the district court failed to acknowledge the nature of the procedures for reviewing an individual permit application. As noted above, the normal individual permitting process *requires* evaluation of any permit application for eligibility under an NWP. 33 C.F.R. § 330.1(f) (2003). Plaintiffs were thus already on notice that application assessment under the individual permit framework *necessarily* included review for potential NWP eligibility. There can be nothing "unfair," misleading, or secretive about the Corps proceeding in precise accordance with its openly promulgated regulations.

Plaintiffs further contend that § 330.1(f) does not apply because the revised proposal was not an "incoming application" within the regulatory meaning of that term when the Corps decided to verify its eligibility for NWPs. They observe that automatic NWP eligibility review applies only to "incoming applications for individual permits." *Id.* They further note that under § 330.1(f), if a District Engineer notifies an applicant of project modifications which could render his proposal eligible for an NWP, the Engineer should nonetheless "proceed with processing the application as an individual permit and take the appropriate action within 15 calendar days of receipt, in accordance with 33 C.F.R. § 325.2(a)(2), unless the applicant indicates that he will accept the modifications or conditions." *Id.* Plaintiffs therefore argue that, in context, an "incoming application" must be understood as an application which arrived no more than fifteen days before the § 330.1(f) decision. Thus, because the Corps verified NWP eligibility in this case after that fifteen-day period had expired, plaintiffs argue that the NWP verification cannot be justified under § 330.1(f).

Plaintiffs' construction of the regulation's text is strained, to say the least. Section 330.1(f) simply does not establish a deadline for the Corps's decision to approve an individual permit application under an NWP. "Incoming application," a phrase not defined elsewhere in the regulations, is most naturally read as another way of referring to any application that has been received by the Corps. And the fifteen-day period referenced by plaintiffs is simply and solely a time frame for taking "appropriate action ... *in accordance with 33 C.F.R. § 325.2(a)(2).*" *Id.* (emphasis added). Section 325.2(a)(2) is the regulation requiring the District Engineer to determine within fifteen days of receiving a permit application whether the application is complete, and then to issue public notice of the pending review if it is. The ***221**

quoted section of § 330.1(f) thus does no more than admonish the Corps, even if it is considering verifying an NWP for a proposed project that is in the individual permitting process, not to delay in fulfilling its existing obligations under § 325.2(a)(2). The language certainly does not establish a deadline for sua sponte NWP verification. It would simply confound common sense to assume that § 330.1(f) requires the Corps to decide immediately and irrevocably--at the very outset of the lengthy individual permit application process, and regardless of the size and complexity of the construction project--whether a proposed project is eligible for one of the Corps' many NWPs.

We therefore hold that the procedures followed by the Corps in its review of Hanover County's permit application were lawful. [FN1]

> FN1. In view of the foregoing discussion, we have no need to take up appellants' argument that the Corps' discretionary authority under 33 C.F.R. § 330.4(e)(3) also justified its verification of the revised project's eligibility for an NWP.

IV.

Plaintiffs' other principal challenge to the Corps' NWP decision goes to the substance of the County's application itself. Even if the Corps is generally allowed to switch from individual permitting to the NWP verification process in circumstances such as these, plaintiffs contend, the County's revised proposal should not have been verified as eligible for multiple NWPs because it was not a "single and complete project." [FN2]

FN2. Plaintiffs also contend that the County's application for an individual permit should have been rejected as incomplete before it ever got to the stage of automatic NWP eligibility review, because the application failed to include all activities that were "reasonably related" to the proposed project. *See* 33 C.F.R. § 325.1(d)(2) (2003). While the parties disagree about whether this requirement even applies to a case where the proposal was ultimately approved under the NWP program and not under an individual permit, we need not resolve that dispute now. The Corps and the District Court both assumed--and none of the parties have contested--that these two standards (the "reasonably related activities" standard for individual permits and the "single and complete project" standard for verifications under multiple NWPs) require essentially the same thing. 214 F.Supp.2d at 646-48. At least in this case, then, for the same reasons that the County's application passes muster under the "single and complete project" standard, it also satisfies the "reasonably related activities" requirement of § 325.1(d)(2).

In order to qualify for approval under the NWPs at issue in this case, a proposal must constitute a "single and complete project." 33 C.F.R. § 330.6(c) (2003). This means that the proposal must represent "the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers." 33 C.F.R. § 330.2(i) (2003). The test governing this inquiry is whether the project has "independent utility"--or in other words, whether it "would be constructed absent the construction of other projects in the project area." 67 Fed.Reg. 2020-01, 2094

(Jan. 15, 2002). As the district court noted, this ensures that the Corps has complete information about the full dimension and reach of a project so that it can make an informed decision about the project's cumulative effect on wetlands. 214 F.Supp.2d at 648. This in turn prevents applicants from circumventing review of a project which would have more than minimal environmental impact by breaking it up into several smaller proposals, each of which would have sufficiently minimal impact to qualify for NWP verification.

Plaintiffs contend that a "fundamental purpose" of the revised project is to enable ***222** the County to avoid exceeding the 5.4 mgd limitation on its sewage treatment contract with Henrico County. They then argue that the project as currently proposed will be unable to stave off that eventuality for more than a few years, and that it therefore necessarily contemplates further related additions in the near future. Despite the fact that the Lee Davis pipeline's initial peak flow capacity is 2.6 mgd and could easily be raised to 7.1 mgd, plaintiffs contend that the Lee Davis pipeline will never actually offload significantly more than 0.8 mgd of wastewater (the amount projected for the first year of the pipeline's operation) from Henrico County's processing facilities. They ground this conclusion on an assertion that the County has not specifically demonstrated that the area served by the pipeline will ever generate significantly more sewage than that first-year figure. If plaintiffs' contentions are correct, the great majority of excess sewage will be generated in areas not serviced by the Lee Davis pipeline and therefore inaccessible to the new wastewater treatment plant. Relying on this assumption, plaintiffs assert that the amount of wastewater treated by Henrico would be at its contractual cap of 5.4 mgd by 2007.

The basic problem with plaintiffs' argument is that it seeks

to override and redefine the stated purpose of the County's project. As explained in the Corps' decision document, that purpose is very broad: "to provide additional wastewater treatment capacity so that the County may implement [its] adopted comprehensive plan for 'Smart Growth', limiting high density, suburban- style growth to a small portion of the County (20%) and preserving the rural character of the remainder of the county." Despite this clear language, plaintiffs and the district court erroneously treated the project as though it were targeted at a far narrower goal: staying within the contractual cap of the agreement with Henrico County without making any other future improvements. Contrary to plaintiffs' assertions, however, the Corps was justified in concluding that the project could independently accomplish its stated goal. The County has chosen to create an enormous new source of capacity for wastewater treatment so as to allow for population growth and maximize flexibility for infrastructure planning in the future. Simultaneously, it has enacted medium-term plans to utilize a portion of that new capacity by channeling sewage through the Lee Davis pipeline. Plaintiffs do not deny that both of these purposes will be fulfilled by the revised project.

There is no doubt that other conveyance mechanisms will eventually be needed in order to take full advantage of the treatment plant's capacity. Indeed, some of them have already been tentatively sketched out. But it is simply not possible for the County to predict precisely when, where, and how those sewer lines will actually be constructed. Municipal plans for the location and construction of sewer lines involve so many variables that virtually the only sure thing about them is that they will change. Growth in a county as a whole slows and accelerates. The distribution of growth within the county shifts and fluctuates. State and federal regulatory frameworks change. For all these reasons,

the Clean Water Act does not require counties to set in stone their infrastructure plans for the next fifty years. Rather, the question with any given application is whether the proposed project is reasonably defined to include all of its definitely planned, concretely identifiable elements. And the presumptive arbiter of the point at which speculative or inchoate plans become sufficiently foreseeable to require inclusion in an NWP verification request is the Army Corps of Engineers, not an Article III court.

***223** In fact, even if the revised project were principally intended to keep Hanover County under the Henrico contractual cap for a significant period of time, there was ample evidence to support the Corps' finding that the revised project will do exactly that. To begin with, the district court failed to defer to the Corps' finding that the Lee Davis pipeline will offload wastewater flow "in quantities nearly comparable to the [Interceptor]," which if true would mean that Hanover *would* be able to "remain within its contractual limits ... for an additional 7 to 10 years." [FN3] In rejecting this conclusion, plaintiffs argued that Hanover County had not sufficiently supported its statement that development in the County would occur at a significantly faster rate within the Lee Davis pipeline service area. [FN4] Plaintiffs therefore assumed that the total amount of wastewater offloaded through the Lee Davis pipeline would be dramatically smaller than the total increase in wastewater production throughout the county. This may be one permissible inference from the evidence. The contrary inference, however, is far from arbitrary or capricious. And the Corps made precisely that contrary inference, concluding that a disproportionate quantity of the new sewage would be accessible to the Lee Davis pipeline.

FN3. It is important to note that these calculations did not rely on the presence of the Bell Creek sewer line. There was sufficient evidence in the record to support the Corps' conclusion that the Bell Creek sewer is properly understood, not as a piece of the County's revised proposal, but as an integral element of a separate, self-contained unit--the housing development and its appurtenant infrastructure. The anti-segmentation principle does not require the aggregation of a series of independent projects simply because they may have some points of common contact. *Cf. Save Barton Creek Ass'n v. Fed. Highway Admin.*, 950 F.2d 1129, 1139-44 (5th Cir.1992) (discussing segmentation and independent utility principles in context of National Environmental Policy Act); *Coalition on Sensible Transp., Inc. v. Dole,* 826 F.2d 60, 68-70 (D.C.Cir.1987) (same). The Bell Creek sewer is certainly not, as plaintiffs contend, a tacit replacement for the original Totopotomoy Creek Interceptor. The Bell Creek sewer will stretch over only 0.42 miles of the originally proposed 5.6-mile Interceptor, and it will have scarcely forty percent of the Interceptor's capacity.

FN4. We note but do not address the County's contention that the reason it did not further flesh out its findings in this area was because of the extensive attention it paid to a vast array of other issues raised by both the Corps and plaintiffs. It appears that the first time plaintiffs presented their calculations regarding insufficient wastewater flow through the Lee Davis pipeline was during proceedings before the district court. *See Vt. Yankee Nuclear Power Corp. v.*

Natural Res. Def. Council, Inc., 435 U.S. 519, 553-54, 98 S.Ct. 1197, 55 L.Ed.2d 460 (1978) (objections must be lodged before administrative agencies with reasonable specificity).

The district court argued that the Corps' finding on this score relied entirely on information provided to them by the County. 214 F.Supp.2d at 631. Along with plaintiffs, the district court contended that the Corps had a responsibility to independently investigate whether enough of Henrico County's new wastewater would be generated in the Lee Davis pipeline service area to keep the burden on Henrico County beneath the contractual cap for a substantial period of time. *Id.* Precedent does not support the district court's position. *See Friends of the Earth v. Hintz,* 800 F.2d 822, 834-36 (9th Cir.1986) ("The Corps is not a business consulting firm" and may therefore base its analysis "entirely upon information supplied by the applicant."). For us to require the Corps to do such independent studies rather than reasonably relying on extensive studies given to them by applicants "would place unreasonable and unsuitable responsibilities on the Corps," which receives thousands ***224** of permit applications per year. *Id.* at 835-36. The Corps was therefore justified in relying on a County study which concluded that a "large amount of the development that is projected to occur in the immediate future in Hanover will be served by [the Lee Davis] pump station." This finding in turn provided ample support for the conclusion that the Lee Davis pipeline would draw a sufficient proportion of the incremental sewage production to keep Hanover County within its contractual limit for a substantial period of time.

There was also evidence that plaintiffs' prediction of

excessive sewage processing demand was inaccurate because of a mathematical error: the failure to use comparable figures in a comparative calculation. Plaintiffs projected aggregate county sewage production based on the volume of wastewater flow generated by the county in a year of wet weather. But they projected wastewater flow through the Lee Davis pipeline based on the volume generated from that part of the county during a drought year. Unsurprisingly, there was evidence that this apples and oranges comparison yielded a dramatic understatement of the relative capacity of the Lee Davis pipeline to offload sewage flow from Henrico County's processing plant. Indeed, the district court acknowledged that the County's calculations suggested that the revised project--standing alone--would keep Hanover County within its contractual cap for at least ten and possibly as many as seventeen years. 214 F.Supp.2d at 630. Proper respect for the Corps' decisionmaking process required deference to what the district court itself recognized as reasonable calculations supporting the Corps' decision. [FN5]

> FN5. The district court argued that the paper record from the Corps' administrative review did not explicitly include independent calculations made by the Corps itself. Critically, however, the administrative record *does* include the figures on which those conclusions were based. This suffices to demonstrate a "rational connection between [the Corps'] decision-making process and its ultimate decision." *Trinity Am. Corp.*, 150 F.3d at 395 (internal punctuation omitted).

We therefore hold that it was neither arbitrary nor capricious

for the Corps to decide that Hanover County's revised proposal was a single and complete project. We reverse the district court and rein-state the Corps' verification of the proposal's eligibility for NWP approval.

V.

In the final analysis, plaintiffs' effort to use environmental regulations to thwart the County's wastewater management efforts is misguided, not only under the letter of those regulations, but in light of their spirit as well. Every state and federal agency that reviewed this application either commented favorably on the revised proposal or noted no objection to it after further study. No private environmental group has intervened in an effort to stop or modify the County's plans. And there is ample evidence to suggest that Hanover County's proposal is an environmentally sound project that promises to benefit the County in the long run. The proposed project will treat and eliminate septic wastewater, thus managing what could otherwise present a significant health risk. Equally important, the treatment plant and supporting infrastructure is intended to play a critical role in Hanover County's environment-friendly "Smart Growth" policy. County planners proposed this project in the first place to enable the construction of concentrated development tracts (which require sewers rather than septic systems), and thereby to help minimize the footprint of housing developments and preserve ***225** a significant portion of the County in a pristine and rural state. Evidence available to the Corps thus suggested that, far from endangering Hanover County's natural environment, the wastewater treatment plant showed every likelihood of helping to protect it.

We reverse the district court's order and remand the case to

the district court with directions to enter judgment for the defendants.

REVERSED

325 F.3d 211, 56 ERC 101

214 F.Supp.2d 593
55 ERC 1643
(Cite as: 214 F.Supp.2d 593)

United States District Court,
E.D. Virginia.
Richmond Division.

Frances Broaddus CRUTCHFIELD and Henry Ruffin Broaddus, Plaintiffs
v.
UNITED STATES ARMY CORPS OF ENGINEERS and County of Hanover, Virginia,
Defendants.

No. CIV.A. 3:02CV253.

Aug. 7, 2002.

***597** Williams B. Ellis, Benjamin A. Thorp, III, Ellis & Thorp, Richmond, VA, for Plaintiffs.

Gregory S. Williams, U.S. Dept. of Justice, Environmental Defense, Environment and Nat. Resources Div., Washington, DC, Katherine D. Will, U.S. Army Corps of Engineers, Norfolk Div., Norfolk, VA, M. Hannah Lauck, U.S. Attorney's Office, Richmond, VA, for Corps.

Sterling E. Rives, III, Yvonne S. Wellford, Hanover County Attorney's Office, Hanover, VA, William G. Broaddus, McGureWoods LLP, Richmond, VA, for Hanover Co.

MEMORANDUM OPINION

PAYNE, District Judge.

The County of Hanover, Virginia (the "County") received from the United ***598** States Army Corps of Engineers (the "Corps") authorization to build a project, the purpose of which is to collect sewage, treat it, and then discharge the treated sewage into the Pamunkey River. As designed, the point of discharge (or "outfall") would be located on property that Frances Broaddus Crutchfield and Henry Ruffin Broaddus (the "Plaintiffs") own, and the discharge would be dispersed into the Pamunkey River by a diffuser that would be located in the Pamunkey River where the river abuts the Plaintiffs' property.

The Virginia Department of Environmental Quality (the "DEQ") has classified the Pamunkey River as "impaired" because the level of fecal bacteria extant therein exceeds that which is allowable under applicable water quality standards. [FN1] The Pamunkey River also suffers from shortage of dissolved oxygen and, for that reason, the DEQ has listed it as "threatened due to natural conditions." *See* Administrative Record, at 1806-08.

> FN1. *See generally,* Rex Springston, *Dirty Water Report Issued, Richmond Times Dispatch,* July 15, 2002, at B1-B2; Water Quality Assessment and Impaired Waters Reports, Virginia Department of Environmental Quality, July 2002, *available at* http://www.deq.state.va.us/water/303d/factsheets/yorkfs.pdf.

In a previous action, the Court invalidated the Corps'

decision to verify that the County could construct a slightly different version of the project pursuant to several so-called Nationwide Permits ("NWPs"). The matter was remanded to the Corps, which, by a Memorandum for the Record ("MFR") dated April 4, 2002 (the "April 4 MFR"), decided that the County could proceed with a modified version of its wastewater treatment project under a different set of NWPs. In this action, the Plaintiffs challenge that second permitting decision.

For a complete understanding of the previous litigation, it is advisable to refer to the Memorandum Opinions issued in *Crutchfield v. United States Army Corps of Engineers,* Civil Action No. 3:00cv525, on August 14, 2001, [FN2] November 2, 2001, [FN3] and December 12, 2001, [FN4] and to the Memorandum Order issued May 22, 2002 (collectively referred to as "*Crutchfield* I"). Those decisions provide a comprehensive review of the first dispute, resolution of which preceded, and forms the background of, this action. In the interests of brevity and completeness, the opinions in *Crutchfield* I are incorporated here, however, a summary review of the prior litigation is set forth in Section I.A.

FN2. Reported at 154 F.Supp.2d 878 (E.D.Va.2001).

FN3. Reported at 192 F.Supp.2d 444 (E.D.Va.2001).

FN4. Reported at 175 F.Supp.2d 835 (E.D.Va.2001).

Like *Crutchfield* I, this action was filed pursuant to the

judicial review provisions of the Administrative Procedure Act, 5 U.S.C. § 551, *et seq.* (the "APA"). The Complaint alleges that, in addition to violating the APA, the decision-making process through which the Corps verified the County's use of four NWPs as the authority under which to construct its revised sewage treatment project contravened the Clean Water Act ("CWA"), 33 U.S.C. §§ 1251 *et seq.;* the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 *et seq.;* and the National Historic Preservation Act ("NHPA"), 16 U.S.C. §§ 470 *et seq.* The Plaintiffs contend that, for a second time, the Corps' actions with respect to the County's project were arbitrary, capricious, and not in accordance with law. [FN5] The parties have submitted ***599** briefs in support of their respective positions on the merits of the Plaintiffs' challenge, and, on July 10, 2002, oral argument was heard. For the reasons set forth below, the Corps' decision to verify the NWPs, as articulated in the April 4 MFR, is set aside as arbitrary, capricious, and not in accordance with law.

> FN5. The Plaintiffs sought preliminary injunctive relief to prohibit the County from undertaking construction on its wastewater treatment project pending review of the merits of their claims, however, by a May 17, 2002 oral ruling from the bench, such relief was denied. The decision denying the Plaintiffs' motion for preliminary injunctive relief also was memorialized by Order entered May 21, 2002.

I. STATEMENT OF FACTS

A. *Crutchfield* I

As stated above, the nature and evolution of this dispute can be appreciated fully only in perspective of the decisions in *Crutchfield* I, however, for present purposes, an abbreviated review of that case must suffice. Under the circumstances outlined exhaustively in the decisions issued in *Crutchfield* I, the County planned, and began construction of, a wastewater treatment project, several aspects of which implicated federal environmental laws and regulations, and, as such, required authorization by the Corps. That project, as it originally was conceived, involved construction of a wastewater treatment plant (the "WWTP"), an interceptor pipeline to carry untreated wastewater to the WWTP for treatment (which the parties referred to as the "TC Interceptor"), a discharge forcemain, and an outfall/diffuser structure. *See generally Crutchfield,* 154 F.Supp.2d at 881-86, 175 F.Supp.2d at 838-40, 192 F.Supp.2d at 447-51. Pursuant to the CWA and its implementing regulations, the Corps was called upon to decide what type of permits, if any, could issue to authorize the County to undertake certain activities (*i.e.,* dredging, filling, and construction) involving wetlands upon which components of that project were intended to be built. [FN6] On June 7, 2000, the Corps issued a Memorandum for the Record verifying that the County was authorized to proceed with construction of the WWTP, forcemain, and outfall pursuant to Nationwide Permits ("NWPs") because those three components of the project would cause only minimal impacts to wetlands. However, the Corps also decided that the TC Interceptor needed to be assessed under the more stringent regulations applicable to individual permits because the impact on wetlands of that component would be more than minimal.

FN6. The Corps' permitting decisions involved: (1) making certain evaluations under the CWA and other

environmental laws; and (2) deciding whether to require certain kinds of permits which, in some circumstances, would give rise to an obligation to conduct additional evaluations pursuant to NEPA and NHPA. *See generally Crutchfield,* 154 F.Supp.2d at 893-905, 175 F.Supp.2d at 838-39.

At the risk of oversimplification, there are two basic processes through which the Corps may confer its regulatory approval upon projects that affect wetlands which are subject to its jurisdiction. One is the general permit procedure, of which verification of an NWP authorization is one kind. The other is the issuance of an individual permit.

Projects that are permitted to proceed under NWPs undergo no significant environmental review under the CWA; that is because such a project qualifies for NWP status only upon a preliminary determination that it will have "minimal impacts" upon wetlands. In contrast, projects that must proceed pursuant to the individual permit process undergo a rigorous environmental review. Clearly, it is significantly advantageous for a permit applicant to be allowed to proceed under an NWP ***600** and, thereby, avoid the expense and delay that attends the more thorough environmental scrutiny that is inherent in the individual permit process. Thus, the determination whether a project poses a greater than "minimal impact" on wetlands is of critical importance. And, as shown in *Crutchfield* I, the definition of the project is a fundamental aspect of the determination that a project will, or will not, engender only "minimal impacts." [FN7]

FN7. For a more thorough explanation of the differences between NWPs and individual permits,

see Crutchfield, 154 F.Supp.2d at 893-94. As stated there:

Under the CWA, the Corps has established two mechanisms to authorize the conduct of activities that affect waters of the United States: individual permits and general permits. *See* 33 C.F.R. § 325.5. The Corps issues individual permits after reviewing applications. "Individual permit" means "a DA authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures of this regulation and 33 CFR part 325, and a determination that the proposed structure or work is in the public interest pursuant to 33 CFR part 320." 33 C.F.R. § 322.2(e). The Corps also may issue general permits "that authorize a category or categories of activities in specific geographical regions or nationwide." 33 C.F.R. § 320.1(c); *see also* 33 C.F.R. § 322.2(f) .... Nationwide permits (NWPs) ... are nationwide general permits that "are designed to regulate with little, if any, delay or paperwork certain activities having minimal impacts." 33 C.F.R. § 330.1(b) .... NWPs are issued to allow conduct of a class of activities that the Corps has studied that, either because of the nature of the activity or the small reach of its impact, have sufficiently minimal impact as to justify bypassing the stricter regulatory review given applications for individual permits. In contrast, standard individual permits require compliance with "public interest review procedures, including public notice and receipt of comments." 33 C.F.R. § 325.5(b)(1). This public interest review involves an evaluation of "the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work." 33

C.F.R. § 320.4(a)(2)(ii).
Crutchfield, 154 F.Supp.2d at 893-94.

The gravamen of the Plaintiffs' claims in *Crutchfield* I was that, in verifying that the County could proceed with construction of the WWTP, the forcemain, and the outfall, the Corps had failed to take into account the environmental impacts of the TC Interceptor, for which the County separately had sought authorization in the form of an individual permit. By authorizing the County to proceed in that manner, the Plaintiffs argued, the Corps had allowed the County improperly to "segment" the TC Interceptor from the other components of the project, thereby evading the full measure of regulatory scrutiny that the environmental laws require. *See id.* at 881. The record reflected that the Plaintiffs were correct; and, therefore, the verifications that the Corps had given were set aside as arbitrary, capricious, and not in accordance with law. [FN8] *See Crutchfield,* 154 F.Supp.2d at 904-06. The matter was remanded to the Corps so that it could evaluate the project as a whole and, in perspective of that evaluation, satisfy the applicable requirements of the CWA, NEPA and NHPA.

FN8. In *Crutchfield* I, just as they do in this action, the Plaintiffs alleged that the defendants' decision to verify NWPs, and the process through which they reached that decision, violated the APA, CWA, NEPA, and NHPA.

In perspective of that judgment, and by letter dated September 25, 2001, the Corps informed the County that it had "determined that all four components of the County's

expansion of its sewage treatment system should be consolidated into a single [Joint Permit Application] for review and processing of an individual Department of the Army permit." Accordingly, the Corps asked the County to ***601** "modify [its] current [individual permit application for the TC Interceptor], along with the necessary appendices, drawings and supporting information, to include the WWTP, forcemain and outfall." *See Crutchfield,* 192 F.Supp.2d at 451.

The Corps informed the Court of that development in a pleading filed October 2, 2001, one day before a scheduled hearing on the Plaintiffs' motion for permanent injunctive relief. The Corps represented that it would "address all components of the project in a single permitting action and [that it would] do so in the context of an application for an individual permit rather than a request for an NWP authorization." In that same pleading, however, the Corps also expressed that it did "not understand the Court to have required an individual permit application for any of the project components[,]" and, instead, had "made its decision to require an individual permit application for the [I]nterceptor, WWTP, forcemain, and outfall on a number of factors, including a reevaluation of the permitting procedures that would be most appropriate in light of the Court's decision." [FN9]

> FN9. October 2, 2001, Pre-Hearing Brief by United States Corps of Engineers, at 2-3, *filed in Crutchfield v. United States Army Corps of Engineers, et al.,* Civil Action No. 3:00cv525.

By the time that decision was issued, the County virtually

had completed construction of the forcemain and had made substantial progress in constructing the WWTP. However, construction of the outfall/diffuser and, of course, the TC Interceptor had not begun. The County desired to continue work on the WWTP, but the Plaintiffs objected. Thus, the parties argued, and adduced evidence respecting, whether injunctive relief was necessary pending completion of the tasks with which the August 14 Opinion charged the Corps on remand. In perspective of both the facts of record and the relevant legal principles, the Court determined that injunctive relief was appropriate. *See id.* at 466- 67. Therefore, on November 2, 2001, the County was enjoined from undertaking further construction on the wastewater treatment project until such time as the Corps, on remand, properly and fully had discharged its statutory responsibilities. *See id.*

On November 16, 2001, and in accordance with the Corps' letter of September 25, the County submitted to the Corps a revised Joint Permit Application (the "November 16 JPA") in which it sought authorization to construct the WWTP, forcemain, and outfall/diffuser (as those components of the project originally had been designed), as well as a new component referred to as the Lee Davis Pump Station and Forcemain (the "Lee Davis Alternative"). A.R., at 1468. The County explained that the Lee Davis Alternative was intended to replace the TC Interceptor as the initial means through which raw sewage would be conveyed to the WWTP. Whereas the TC Interceptor had been expected permanently to impact 3.84 acres of wetlands, which would have disqualified it for verification under any NWP, the Lee Davis Alternative was expected to impact only 30 square feet of wetlands. The County also represented that it had abandoned any plans to construct the TC Interceptor in the foreseeable future, and it formally withdrew its original permit application for that component. *See generally*

Crutchfield, 175 F.Supp.2d at 840-42.

Having done so, the County filed a motion to stay the order of injunction entered on November 2, which the Court converted into a motion seeking dissolution of that ***602** injunction. [FN10] That motion was premised upon what the County contended was a significant change in circumstances brought about by its submission of the revised JPA--*i.e.,* the fact that construction of the revised project (as described in that application), would cause substantially less impact to wetlands than previously had been anticipated. [FN11] For the reasons set forth in the Memorandum Opinion issued December 12, 2001, that motion was denied. *See Crutchfield,* 175 F.Supp.2d at 849.

FN10. *See Crutchfield,* 175 F.Supp.2d at 840-41. To be precise, the County actually filed its motion to stay on November 9, 2001, a few days before it submitted its revised JPA, however, on November 16, it filed a revised motion to stay, which it based on its submission of the November 16 JPA. *Id.*

FN11. The County also proffered the Corps' representation that it would assign entirely new staff members to consider, and to make ultimate permitting decisions with respect to, the County's revised JPA as an additional "change in circumstances" warranting dissolution of the injunction. *See Crutchfield,* 175 F.Supp.2d at 840-43; 847-49.

Accordingly, the Corps proceeded with its consideration of

the revised JPA with the November 2 injunction still firmly in effect--that is to say, the County could not, and did not, undertake any construction activity on the project while the Corps reviewed the new JPA. Approximately four months later, the Corps issued the April 4 MFR in which, rather than declaring whether the County's application satisfied the criteria for approval of an individual permit, it again verified that the County could proceed with construction of the several components of the revised project under the authority of NWPs (albeit different NWPs than were at issue in *Crutchfield* I). On that same day, the Corps notified the Court of its decision.

B. The Plaintiffs' Challenge in this Case

Almost immediately after the April 4 MFR was issued, the County sought dissolution of the injunction that had been in place since November 2, 2001. The Plaintiffs filed both a brief in opposition to the County's motion to dissolve that injunction and this, entirely new, action. As noted above, the Plaintiffs also moved for preliminary injunctive relief which, if granted, would have had the practical effect of prohibiting the County from undertaking the construction activities that the newly verified NWPs otherwise authorized it to undertake.

Recognizing that there were "a significant number of common factual and legal issues presented by" the County's motion to vacate the November 2 permanent injunction and the Plaintiffs' motion for preliminary injunctive relief in the new action, and with an eye toward avoiding inconsistent adjudication of those common issues, those motions were set for simultaneous briefing and oral argument. On May 17, 2002, the County's motion to vacate the November 2 injunction was granted because its purpose had been

accomplished. [FN12] The Plaintiffs' motion for a preliminary injunction was denied because they had failed to demonstrate that they would suffer ***603** irreparable injury before this action could be decided on its merits.

> FN12. Because the County had appealed several of the judgments in *Crutchfield* I, the act of vacating the November 2 permanent injunction properly could not be effected until the United States Court of Appeals for the Fourth Circuit remanded the case, thereby reinstating this Court's jurisdiction over the parties for the limited purpose of dissolving that injunction. That all was accomplished pursuant to the Fourth Circuit's teachings, *see Fobian v. Storage Technology Corp.,* 164 F.3d 887, 891 (4th Cir.1999), and, by Order entered June 4, 2002, the November 2 permanent injunction formally was vacated.

The action was set for hearing on the merits of the Plaintiffs' challenge, which calls into question both the process by which the Corps reached its decision to verify NWPs for the County's revised project and the legality of the decision. It is necessary, therefore, to discuss in some detail the project for which the County sought the Corps' authorization, the process through which the Corps reviewed that project, and the findings that the Corps made in its April 4 MFR.

1. The Purpose Of The Project

The record here, as in *Crutchfield* I, demonstrates that "[t]he construction and operation of the wastewater treatment project are integral to the County's ability to meet its goals under its 'Comprehensive Plan,' the purpose of which is to

help the County manage population growth and expansion in an orderly manner." *Crutchfield,* 192 F.Supp.2d at 447. [FN13] The County currently satisfies its need for wastewater treatment by using two of its own wastewater treatment facilities, which are located in the northern part of the County's growth area (referred to as the "Suburban Service Area" or "SSA") and by sending sewage from the southern portion of the SSA to Henrico County ("Henrico") for processing. The latter method of sewage treatment is accomplished pursuant to a contractual arrangement between the County and Henrico that allows the County to treat up to 5.4 million gallons per day ("mgd") at Henrico's facilities. *See id.* at 448, n. 2. Administrative Record, at 426 (hereinafter cited as "A.R., at _____.").

> FN13. Pursuant to the Comprehensive Plan, growth and the public resources necessary to sustain that growth are systematically directed into the "Suburban Service Area" in order to preserve the rural character of the remainder of the County.

It is undisputed that the principal benefit that the County expects to derive from its operation of the wastewater treatment project that is at issue here is the diversion from Henrico, to its own treatment facility (the WWTP), of a substantial amount of wastewater. [FN14] Such "off-loading" of sewage, as the parties have referred to it, would allow the County to avoid (at least temporarily) what it perceives as an imminent threat of exceeding the 5.4 mgd limit of its contract with Henrico. [FN15] Specifically, the County predicts ***604** that, absent the improvements that it intends to build, and in perspective of the approximately 4% growth per year that is anticipated within the SSA, it would

need to divert approximately 5.71 mgd to Henrico as of the year 2003. A.R., at 1411. That amount, of course, would exceed the County's contractual limitation. Thereafter, in 2004, 2005 and 2006, the County predicts that it would need to divert 6.22 mgd, 6.72 mgd, and 7.3 mgd, respectively, to Henrico. *Id.* That magnitude of off-loading is untenable, however, because Henrico officials have indicated that they are not inclined to modify Henrico's contract with the County to accommodate such growth. A.R., at 1409-10. Therefore, at least in large part, the County must fend for itself, which is a major impetus driving its efforts to improve its wastewater treatment system.

FN14. As stated in a document entitled "Hanover County Wastewater Alternatives Study Prepared for the United States Corps of Engineers", which is part of the administrative record in this case, the County's project "has two components meeting two distinct needs of the County." These two needs are (1) "to provide additional wastewater treatment capacity for the critical short term and long term needs of the County [ ]"; and (2) "to be able to utilize this additional capacity through appropriate conveyance systems." A.R., at 429.

FN15. The County measures the amount of wastewater being diverted to Henrico County under the contract by calculating a 90-day rolling average. For at least one three month period in 1998, the County diverted approximately 4.5 mgd (as measured by the peak rolling average experienced during that time period) pursuant to its contract with Henrico. This 4.5 mgd figure is the highest peak rolling

> average that the County has experienced under the contract. In 1999, this figure decreased to approximately 3.62 mgd. In 2000, the peak rolling average increased from the 1999 figure and, as of the December 4, 2001 hearing respecting the County's motion to dissolve the November 2 injunction, the most recent peak rolling average had been approximately 3.88 mgd (measured in the spring of 2000). Fluctuations in the amount of capacity used under the contract with Henrico depend, in part, on weather patterns. *Crutchfield,* 192 F.Supp.2d at 448, n. 2. Accordingly, the County attributes the decrease in the 90-day peak rolling average between 1998 and 2000 to the extended drought experienced throughout the mid-Atlantic region.

The WWTP would have an initial processing capacity of 5 mgd, however, the County quickly and easily could increase that capacity to 10 mgd, and, ultimately, to 30 mgd. It makes sense, therefore, that the County's second stated objective is "to be able to utilize this additional capacity through appropriate conveyance systems (*i.e.,* sewer lines)." A.R., at 429.

2. The Original Project

As discussed above, the County's first attempt at obtaining federal regulatory approval for its project was frustrated upon a finding that, at the County's urging:

> the Corps ... had arrived at a 'remarkably illogical conclusion' respecting whether the WWTP, the forcemain, and the outfall/diffuser had 'independent utility' from the [TC Interceptor] so that construction of those three components could proceed under authority of NWPs while

> the Corps considered whether to issue an individual permit for construction of the [TC Interceptor].

Crutchfield, 192 F.Supp.2d at 448 (*citing* 154 F.Supp.2d at 895-903; 33 C.F.R. § 330.6(d)).

The decisions in *Crutchfield* I reflect that the dispute in that case centered around the TC Interceptor, which, as noted, was intended to be the means through which the County would begin delivering untreated wastewater to the WWTP (when the WWTP first became operational). As designed, the TC Interceptor was to consist of approximately 30,000 feet of gravity sewer which was to be made of pipeline that would have varied between 36 and 48 inches in diameter and which would have been able to accommodate an average wastewater flow capacity of approximately 12 mgd. A.R., at 457-58. Initially, however, the County intended that the TC Interceptor would deliver only approximately . 75 mgd to the WWTP. A.R., at 460. That conveyance was to be accomplished by connecting other sewer lines (both existing and proposed) to the TC Interceptor, through which the wastewater that those other sewer lines collected would be diverted to the TC Interceptor and, through it, to the WWTP. A.R., 1643. The TC Interceptor was designed to run parallel to the route of the Totopotomoy Creek and, primarily, to serve the portion of the SSA lying within the Totopotomoy Creek watershed. *Id.*

3. The Revised Project

However, after the Court invalidated the Corps' verification of NWPs for the WWTP, forcemain, and outfall components of the original project, the County decided to forego construction of the TC Interceptor, and it abandoned its application for an individual permit for that component. Instead, the County revised the project so that, at least

initially, wastewater would be conveyed to the WWTP through the Lee Davis Alternative, which would consist of a ***605** pump station (that initially would serve approximately five square miles of the SSA) and a forcemain (through which wastewater collected from that area would be pumped to the WWTP). A.R., at 451-53. In contrast to the TC Interceptor, however, the Lee Davis Alternative, and the existing and proposed sewer lines that the County envisions connecting thereto, primarily would serve a portion of the SSA lying to the south of the Totopotomoy Creek watershed area. A.R., at 1643.

The record reflects that the Lee Davis Alternative is designed initially to convey approximately .7 mgd of wastewater to the WWTP, which is only slightly less than the TC Interceptor was designed to convey. [FN16] A.R., at 452- 54. In terms of the 90-day rolling average measurement, that .7 mgd of wastewater would result in an approximately .8 mgd decrease in the peak 90-day rolling average that the County otherwise would expect to experience under its contract with Henrico. [FN17] That is to say, the County anticipates that, if the Lee Davis Alternative were to become operational in 2003, the peak 90-day rolling average under its contract with Henrico would decrease by an amount equal to the .8 mgd that would be off-loaded to the WWTP. A.R., 452; 1411. The County asserts that, even absent any other additions or improvements to its wastewater treatment system, the Lee Davis Alternative would provide sufficient flows of wastewater to allow the County not only to begin operating the WWTP but also to remain within the limit of its contract with Henrico. A.R., at 451.

FN16. The initial flow capacity of the Lee Davis

Alternative (*i.e.*, the maximum amount of flow that could be conveyed thereby) is approximately 2.6 mgd, however, the County anticipates that, with relative ease, it could undertake improvements to that component that would increase its capacity to approximately 7.1 mgd. A.R., at 453-54.

FN17. The County utilizes a ratio of 1.142 to convert the "average daily flow" figure into the 90-day rolling average figure. A.R., at 452.

There appears to be no dispute that the flow from the Lee Davis Alternative would provide enough sewage to the WWTP to allow the County to begin operating the WWTP. However, the Plaintiffs strenuously challenge the latter assertion-- that, on its own, and with no additional improvements, the Lee Davis Alternative would convey enough wastewater to the WWTP to meaningfully assuage the County's self-proclaimed wastewater treatment crisis. [FN18] That challenge forms a core component of their arguments with respect to both the evidentiary basis upon which the Corps premised its April 4 permitting decision and the process through which it reached that decision. With that in mind, it is appropriate to consider those issues (*i.e.*, the facts of record respecting the Corps' decisional process and the information upon which it based its ultimate decision).

FN18. Hanover County, like most of Virginia, currently is experiencing the worst drought in thirty years. The County collects its storm water runoff and sewage in the same conduits and they are then

treated together. With the drought there is very little storm water runoff and hence the County is not, at the moment, at risk of exceeding its contract limits with Henrico. Of course, a change in the weather would alter that circumstance. The County prudently is not basing its wastewater treatment plans on a continuation of the drought.

4. The Corps' Decisional Process

The administrative record consists of some six thousand pages, most of which have nothing to do with the Plaintiffs' challenge here. Similarly, although the Corps' decisional document is forty-seven pages in length, the parts that are relevant to the ***606** issues in this case consist of, at most, fifteen pages. [FN19]

FN19. Moreover, if the Plaintiffs are correct in their substantive positions, much of the administrative record, and about two-thirds of the April 4 MFR, are of little value because they are predicated on an irrelevant factual scenario--a project the dimensions of which are incomplete or inaccurate. *See infra.*

a. The Pre-Application Meeting, Submission Of The JPA, And The Plaintiffs' Initial Objections

Following the judicial invalidation on August 14, 2001 of the Corps' June 7, 2000 permitting decision, and in accordance with the Corps' representation that it would assign staff members to undertake the tasks with which it had been charged on remand who were different than those that

had participated in the original decision, the Corps assigned primary responsibility over the County's revised JPA to Ms. Pamela K. Painter. A.R., at 2835. On November 9, 2001, which was one week after entry of the permanent injunction in *Crutchfield* I, Ms. Painter met with representatives from the County "to discuss the submission of [the County's] new application" for its wastewater treatment project. A.R., at 2654.

Ms. Painter refers to that pre-application meeting in a November 16, 2001 Memorandum for the Record (the "November 16 MFR"), in which she states that "[a]s a result of the recent litigation, *the Corps will be processing the application as an individual permit rather than as Nationwide Permits.*" *Id.* (emphasis supplied). Accordingly, she explains, "the County wanted to meet with us to discuss the process before submitting their application." *Id.* The November 16 MFR continues by describing the topics that Ms. Painter and the County representatives discussed at that meeting, among which were "alternatives to the proposed project, the individual permit review process, [and] the requirements for a complete application[.]" *Id.* It was decided that, on December 6, 2001, the County's representatives would "make a presentation of their proposal" at a regularly scheduled Corps intra-agency meeting. *Id.*

Then, on November 16, 2001, the County formally submitted its JPA for its revised wastewater treatment project, which, as noted, sought authorization to construct the WWTP, forcemain, and outfall (all of which were components of the project as it originally had been conceived), as well as the Lee Davis Alternative (which replaced the TC Interceptor).

On the same day, Colonel David L. Hansen, who is the District Engineer for the Norfolk District of the Corps, wrote a letter to United States Senator John Warner and Representative Eric Cantor. A.R., at 2404-05. That letter was a response to a November 8, 2001 letter from Senator Warner and Representative Cantor, in which those legislators expressed their interest in, and opinions on, the Corps' review of the County's project. A.R., at 2401-03. Colonel Hansen's letter states, in relevant part, as follows:

> I have received your letter of November 8, 2001 requesting that the Norfolk District reconsider the decision to require an individual permit for Hanover County's [TC Interceptor], wastewater treatment plant, discharge forcemain and discharge outfall.
>
> *Preliminary information received at a pre-application meeting* with the County on November 9, 2001 *indicates that the wetland impacts of these activities may indeed be minimal and the project may qualify for Nationwide permits.* However, *the District's decision to assert discretionary authority* in light ***607** of the recent litigation, is based on the need to *evaluate all segments* of the project, as well as *alternatives* to the project, as a whole.
>
> *[A] final permit decision by* the Corps could reasonabl[y] be expected within 105 days of receipt of a complete permit application from Hanover County. Hanover County's new application was hand delivered to the Norfolk District today and my staff has begun the initial review for completeness.

A.R., at 2404 (emphases supplied).

It is undisputed that an application for an individual permit must be "complete" before the Corps may issue public notice that it will review the project described in that application. [FN20] *See* 33 C.F.R. § 325.1(d)(9) (explaining

that "[a]n application will be determined to be complete when sufficient information is received to issue a public notice."). One essential aspect of the Corps' inquiry into the "completeness" of an application is governed by 33 C.F.R. § 325.1(d)(2), which provides:

> FN20. The Corps' regulations respecting issuance of permits require that the general public receive notice, and have an opportunity to comment on, the Corps' decisions whether to issue permits. The nature and timing of this notice, however, varies depending upon the type of permit that is under consideration. Basically, with respect to NWPs, the regulations afford the public notice, and an opportunity to comment, before such permits are promulgated. *See* 33 C.F.R. § 330.4; 330.5. After such NWPs are issued, however, parties may undertake the types of activities authorized thereby without giving the public additional notice. *See* 33 C.F.R. § 330.4. In contrast, due to the case-by-case evaluations that the individual permitting regulations require, the public is entitled to notice each time the Corps considers whether to issue such permits to project proponents. *See* 33 C.F.R. §§ 325.1; 325.2; 325.3.

> All activities which the applicant plans to undertake which are reasonably related to the same project and for which a DA permit would be required should be included in the same permit application. District engineers should reject, as incomplete, any permit application which fails to comply with this requirement.

Ms. Painter was charged with the task of determining whether the County's November 16 JPA was "complete" and,

in this regard, her November 29, 2001 Memorandum for the Record (the "November 29 MFR") indicates that she had some initial "questions concerning the project description[.]" But, after speaking with a representative from the County on November 28, and after "going over the project drawings with him," Ms. Painter believed that she "had a thorough understanding of the project [and] enough information to prepare the public notice[ ]" therefor. A.R., at 2655. [FN21]

> FN21. The County's representative was Mr. Steven Herzog, who is a Utility Engineer and who has been intimately involved in planning improvements to the County's wastewater treatment system.

That same afternoon, however, Ms. Painter read a copy of the Plaintiffs' brief in opposition to the County's motion to dissolve the November 2 injunction in *Crutchfield* I, and, according to the same November 29 MFR, she e-mailed the same County representative (Mr. Herzog) to discuss another concern that had arisen in her mind. [FN22] *Id.* Specifically, Ms. Painter sought additional information respecting the Plaintiffs' contention (which they had articulated in their brief) that "the Lee Davis [Alternative] will serve a completely different area of the County than the [TC] Interceptor [and that] the [November 16] ***608** application submitted to the Corps does not disclose all of the County's planned activities." *Id.* Thereafter, Ms. Painter again communicated with Mr. Herzog and informed him that she "would review [his] response [to her concerns] and determine if the information was sufficient to consider the application complete." *Id.*

FN22. *See* November 27, 2001, Plaintiffs' Response to Motion of Defendant Hanover County to Dissolve Injunction, *filed in Crutchfield v. United States Army Corps of Engineers, et al.,* Civil Action No. 3:00cv525.

On December 7, 2001, counsel for the Plaintiffs sent a letter to Ms. Painter in which he reiterated his clients' position that the County's JPA was not complete; however, it is not clear on what date Ms. Painter actually received that letter. A.R., at 2156. In essence, the Plaintiffs asserted that the County "ha[d] not yet provided [the Corps] with a complete application" primarily because the application did not include "the County's plans for construction of the [TC Interceptor]." *Id.* In response to the County's suggestion that it intended for the Lee Davis Alternative to replace the TC Interceptor, the Plaintiffs noted that "these two methods of sewage collection and delivery will serve completely different areas of the County[ ]" and that "[t]he County's Comprehensive Plan and Water and Wastewater Facilities Master Plan both continue to call for service to be provided in the area that was to be served by the [TC Interceptor]." *Id.* Therefore, the Plaintiffs posited, "[i]t simply is not credible that the County has abandoned the [TC Interceptor], and in fact the County has refused to state categorically that it will not seek to build that portion of the project." A.R., at 2156-57. Counsel also pointed out that the County had not disclosed in its JPA "the plans for and the environmental effects of the other sewage collection facilities [that] it intends to construct." A.R., at 2157. Finally, counsel expressed the Plaintiffs' agreement with "the Corps' decision to process this application as an individual permit[,]" because, in their view, the project, as proposed, "certainly has more than minimal environmental effects." *Id.*

b. The Decision That The JPA Was Complete And The Issuance Of Public Notice

Almost immediately thereafter, the Corps determined that the County's JPA was "complete" (*i.e.*, that the JPA included all "reasonably related" activities that the County planned to undertake), and, on December 11, 2001, it issued public notice soliciting comments about the possible issuance of an individual permit for the project described in the JPA. A.R., at 2158; 2658- 61. The Plaintiffs' counsel was informed of that decision in a letter dated December 13, 2001 from Ms. Painter. *Id.* In that letter, Ms. Painter refers to a December 6, 2001 meeting between Corps officials and representatives from the County, after which the Corps arrived at its decision that the JPA was complete. *Id.* [FN23]

> FN23. In its December 13 correspondence, the Corps informed counsel for the Plaintiffs that "[y]ou may be assured that an evaluation of [his clients' concerns] will be included in the public interest review of this project." A.R., at 2158.

The December 6 meeting is the subject of Ms. Painter's December 10, 2001 and December 27, 2001 Memoranda for the Record (the "December 10 and 28 MFRs"), which set forth the reasoning underlying the Corps' conclusion that the County's JPA was complete (within the meaning of 33 C.F.R. § 325.1). A.R., at 2656-57; 2714-16. As explained in those MFRs, at the December 6 meeting "[t]he County was asked to outline their future plans so that the Corps could determine if any of those activities would be reasonably related to the currently proposed project." A.R., at 2656. The following is Ms. Painter's ***609** description of the

County's response to that inquiry:

> The County explained that the [TC Interceptor] was originally proposed to provide initial flow to the [WWTP] from the existing pump station ... to offload wastewater being sent to Henrico County and to provide enough flow to economically operate the [WWTP]. *The Lee Davis [Alternative] will serve a portion of the Beaverdam Creek basin rather than the Totopotomoy Creek basin that would have been served by the [TC Interceptor].* However, the Lee Davis [Alternative] will *provide wastewater* flow to the [WWTP] in quantities *nearly comparable to the [TC Interceptor]. The reduction in the flow* being sent to Henrico County by the construction of the Lee Davis [Alternative] *will allow for the continued transfer to Henrico County of sewage flow collected* in the Totopotomoy Creek basin. The Lee Davis [Alternative] will therefore allow [the County] *to remain within* its contractual limits of *5.4 mgd* of treatment capacity with Henrico County *for an additional 7 to 10 years with the anticipated 3-4% growth.* The County stated that when warranted by development, additional flow from the existing Shelton Pointe pump station could be diverted via the proposed 16-inch pipe from Henrico County to the proposed [WWTP] through the proposed Lee Davis [Alternative]. Later, when warranted, the replacement of the proposed 16-inch pipe with a 20 to 24-inch pipe would provide additional capacity for the Totopotomoy service area well beyond the anticipated 10-year period. This alternative would eliminate the need for the originally proposed [TC Interceptor] in the reasonably foreseeable future.

A.R., at 2656-57; 2715 (emphases supplied).

Ms. Painter outlined the existence of the following additional considerations, which, apparently, she discussed

with the County's representatives during the December 6 meeting: (1) the County represented that it anticipated "much less development", and a concomitant decrease in demand for wastewater treatment, "along the proposed [TC Interceptor] route than was expected when it was originally added to the [County's] Comprehensive Plan[;]" [FN24] (2) the County expected that four existing pump stations (all of which currently convey wastewater to Henrico and which "are expected to continue to do so for the next 7 to 10 years") "would continue to serve their respective areas of the [C]ounty [;]" (3) upgrades to at least two of those existing pump stations could "allow for additional flow, if needed[;]" (4) the County "also indicated [that] a new pump station for the Powhite Creek basin may be constructed as early as 2007 to pump flow to Henrico or to the new [WWTP] in order to offload more flow from Henrico in the future[;]" and (5) the County "formally withdrew" its original permit application seeking authority to construct the TC Interceptor and represented that it had "removed [that component] from its Comprehensive Plan." A.R., at 2657; 2715.

> FN24. The County explained that this decrease in development was the result of the facts that "[l]arge tracts of land have been designated as historic districts" and that "the County's hopes to attract a [computer] chip [manufacturing] plant to locate within [its borders] did not materialize." *Id.*

The December 10 and 27 MFRs conclude by noting that, although "[t]he County does not claim that some portion of the [TC Interceptor] will never be built in the future," it had "outlined a number of future options for handling sewage ... that do not involve the construction [of that ***610**

component]" and had represented that it could "not justify spending $7 million for the [TC Interceptor] when [it has] much less expensive options to satisfy [its] needs for the next 7 to 10 years which can be phased in as needed." *Id.* Upon those representations, Ms. Painter explained, the Corps "determined that [the] County ha[d] fully disclosed all of the activities that are reasonably related to the project and ... that the [JPA] is complete ...." A.R., at 2657; 2715. That conclusion is articulated in the Corps' April 4 MFR in the following terms:

> [T]he [Corps'] District Engineer determined ... that Hanover County has fully disclosed all of the activities that are reasonably related to the project, and that the application before the Corps is for a single and complete project with independent utility from the previously proposed [TC Interceptor] as well as from any future improvements to the conveyance of wastewater within the County.
>
> A.R., at 6.

c. The Corps' Public Interest Review And The Plaintiffs' Comments

Having determined that the County's application was complete, and having issued public notice respecting the forthcoming regulatory review of the project described therein, the Corps set about to determine whether to authorize the County to proceed with construction of its revised project. [FN25] On December 14, 2001, Ms. Painter visited the sites on which the components of the project would be built "in order to verify the wetland impacts of the previously proposed portions of the project and to evaluate the potential impacts of the newly proposed Lee Davis pump station." A.R., at 6; 2674-75. At the conclusion of that site-visit, and as memorialized her (undated) Site Visit

Report, Ms. Painter made the following recommendation:

> FN25. The Corps' December 11, 2001 issuance of public notice provided for a 30 day period (to end January 11, 2002) within which the public could submit comments respecting the County's revised project. At the request of the Plaintiffs and others (including the United States Fish and Wildlife Service), however, the Corps extended that period through January 25, 2002 because it partially coincided with the holiday season. A.R., at 6; 2159; 2161; 2717.

> *From field observations and desk top review,* it can be concluded that the *magnitude* of the proposed and completed *impacts to wetlands and waters of the U.S. are minimal and could be authorized by general permits.* It appears that the proposed discharge outfall structure would qualify for Nationwide Permit # 7; the completed wetland impacts at the WWTP would qualify for Nationwide Permit # 39; and the proposed utility line activities at the Lee Davis pump station would qualify for Nationwide Permits # 12 and # 18. However, this *preliminary determination is contingent upon verification that the project would meet the other terms and conditions of these Nationwide Permits as well as a review of comments* received from state, federal and local agencies and the general public in response to the Corps' Public Notice. A.R., at 2674-77 (emphasis supplied). Again, Ms. Painter noted that "[t]he originally proposed [TC Interceptor] has been replaced by the proposed Lee Davis [Alternative, therefore,] [t]he wetland impacts associated with the [TC Interceptor] are neither part of the project that is before the Corps nor are they in their entirety reasonably foreseeable

cumulative impacts of the project." A.R., at 6-7.

***611** It does not appear that the Corps ever informed the public (including the Plaintiffs) that, based upon its initial review, and contingent upon the receipt of certain information, it had concluded that the County's revised project might qualify for NWPs. However, it seems clear that, even before it issued notice to the public seeking comments on the November 16 JPA, the Corps internally had arrived at a tentative decision (*i.e.,* a "preliminary determination [that was] contingent" upon certain conditions) that NWP verifications might be appropriate.

Notwithstanding that fact, the record reflects that, over the next few months, the Corps continued to receive comments from the public, including the Plaintiffs, and proceeded with a thorough regulatory review of the County's revised project. [FN26] In particular, on January 18, 2002, the Corps conducted another field visit, this time for the purpose of meeting with the principal opponents of the County's project (*i.e.,* the Plaintiffs and their counsel), at which those parties "outlined their concerns about water quality, inclusion of the [TC Interceptor] as part of the project, consideration of other alternatives[,] and potential effects to anadromous fish in the Pamunkey River." A.R., at 6; 2731-32. Ms. Painter's January 31, 2002 Memorandum for the Record memorializes the "concerns and arguments" that the Plaintiffs raised during that January 18 field meeting. As noted, those concerns involved the issues whether operation of the County's proposed project would unreasonably impair the Pamunkey River; whether the County had been "forthcoming with [its] actual intentions" respecting construction of the TC Interceptor; whether the County had chosen the best location for its proposed wastewater discharge structure; and whether the County thoroughly had considered entirely different (*i.e.,*

regional) alternatives to its wastewater treatment problem. *Id.*

> FN26. That kind of review, which included the Corps' receipt of comments, and necessary approvals, from several federal and state regulatory agencies, A.R., 9-19; 24-31, would have been neither necessary nor appropriate had the Corps, by this point, already decided that the County could proceed under the authority of NWPs. Indeed, the record indicates that, as late as February 13, February 25, and March 6, 2002, representatives from the Corps were responding to public comments by way of a form letter that states, in relevant part, that "[t]he project is presently under review by the [Corps'] staff for an *individual* ... [p]ermit." A.R., at 2431; 2496; 2614; 2617; 2622; 2625; 2629 (emphasis supplied).

Further, on January 25, 2002, [FN27] counsel for the Plaintiffs submitted to the Corps a twenty-six page letter discussing, in great detail, the Plaintiffs' positions with respect to the County's project, A.R., at 1613- 38, as well as numerous other documents in support of those positions. A.R., at 1609-2068. The Plaintiffs advanced the following five main arguments: (1) the County's application was incomplete and, therefore, should be rejected, because it did not include all of the activities that the County planned to undertake and that were reasonably related to the project--namely, it did not include the TC Interceptor; [FN28] (2) in the alternative, if the County truly did not intend to construct the TC Interceptor, ***612** then the application must be denied because, in that event, the WWTP would not need to be constructed in wetlands at all (a fact which would cause the project to violate the

Environmental Protection Agency's "Section 404(b)(1) Guidelines"); [FN29] (3) the County already had conceded that "less damaging alternatives to its outfall location are available"; (4) the project would result in environmentally damaging, and illegal, discharges into the Pamunkey River; and (5) the County had overstated its need for additional wastewater treatment capacity and had failed properly to consider reasonable alternatives to the project it has proposed. A.R., at 1613-14.

FN27. Although counsel for the Plaintiffs mistakenly dated this letter 2001, it is obvious from its context that, in fact, it was written in January of 2002.

FN28. The Plaintiffs proffered the following assertions in support of their argument that the County still intends to construct and operate the TC Interceptor: (1) the County's own planning documents indicate that it must provide wastewater treatment service to the Totopotomoy Creek basin, and those documents have not been modified to reflect the County's purported abandonment of the TC Interceptor; (2) the County has refused to state that it will not build the TC Interceptor and has taken no steps to divest its right-of-way easements for that pipeline; (3) the County is continuing to rely upon, and to promote, the construction of at least a substantial portion of TC Interceptor (which will be built by a private developer to serve a new residential development in the SSA); (4) the County previously has attempted to piecemeal its wastewater treatment system improvements project; and (5) the County has strong incentives not to disclose its intention to

construct the TC Interceptor (or a similar pipeline).

FN29. The purpose of the Section 404(b)(1) Guidelines "is to restore and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material." 40 C.F.R. § 230.1(a), *et seq.*; *see also* 33 U.S.C. §§ 1344(b)(1); 1344(e)(1). Compliance with those Guidelines is a mandatory condition precedent to the promulgation of NWPs and also is a component of the Corps' review of applications for individual permits.

Further still, and on the same day, plaintiff, Henry Ruffin Broaddus, wrote a letter to Ms. Painter in which he "urge[d][her] to deny [the County's] application." A.R., at 2162-67. Setting forth personal, scientific, and policy arguments against the County's proposal (some of which echoed those that his attorney had advanced), Mr. Broaddus appealed to the Corps, as "the regulatory agency that is above the fray of local politics[,]" to look beyond the County's representations. A.R., at 2167.

d. The Corps' Internal Deliberations And Continuing Dialogue With The Parties

A January 29, 2002 internal Corps e-mail contains information respecting a meeting that recently had taken place within the Corps, the subject of which was "Hanover County." A.R., at 2854. The participants included several Corps representatives, including Ms. Painter and Colonel Hansen, as well as representatives of the United States Department of Justice. That e-mail states, in relevant part,

as follows: [FN30]

> FN30. The Corps has redacted certain portions of that e-mail under an assertion that they are subject to the attorney-client privilege, and the Plaintiffs have not challenged that assertion.

> The Colonel's desire is that if the project qualifies for a NW then it should be authorized as such.... From the Colonel's perspective, he does not want to prejudice Hanover County with an IP just because there is a threat of an additional lawsuit. He believes this would set a bad precedent and undermine the validity of NW authorization for projects that do indeed qualify. He would rather issue the NW if it's the right thing to do and risk the lawsuit. As a compromise I suggested that, since the project is out on PN [public notice] and the comment period will close this week, we go ahead and complete the environmental and public interest review. Basically, we will use the results of the analyses to document that either the project has only minimal impacts, in which case we can issue the NW, or show that the impacts are more than minimal and the IP is necessary. ***613** The Colonel is OK with this .... I believe that as long as we complete and use the environmental analysis to determine whether or not the project has less than minimal impact and base our decision on that, we should be on good footing. This approach would place in the administrative record the environmental documentation to support whatever decision we eventually make.
> *Id.*

On January 31, 2002, Ms. Painter sent an e-mail to a representative of the County requesting information

"concerning the originally proposed [TC] Interceptor ... for the Corps' review of the potential cumulative impacts of the County's proposed ... project." A.R., at 1575. Specifically, Ms. Painter sought information respecting the following topics: (1) "the present status of the [TC Interceptor] relating to the County's Comprehensive Plan [,] as well as any future actions regarding the Plan and future [Capital Improvement Projects;]" (2) whether, and on what dates, "developers for new subdivisions (such as the currently proposed Bell[ ] Creek)" might undertake construction of "some sections" of the TC Interceptor "or similar alignments in Totopotomoy Creek[;]" (3) whether, as suggested in certain comments that the Corps had received, "since land for the [TC Interceptor] easement has already been purchased (or condemned), the [TC Interceptor] will eventually be built [;]" and (4) "the current utility of the inflow pump station at the treatment plant site in relation to the originally proposed [TC Interceptor]." [FN31] *Id.*

> FN31. Also on January 31, 2002, Ms. Painter documented a conversation that she had with a representative of the Virginia Department of Health respecting the County's project. A.R., at 2734. She described the opinions of that representative as follows:
> He said from the Health Department's point of view, the treatment plant is where it ought to be and that it was a good project. He said the discharge location is where it has to be and that the water from the discharge pipe will actually be cleaner than the water in the Pamunkey River. He said the Health Department could foresee no water quality problems associated with this discharge.
> *Id.* That conversation, of course, took place before the

Virginia Department of Environmental Quality listed the Pamunkey River as an impaired one because it contained excess quantities of fecal bacteria. *See supra,* note 1.

i. The County's Response To The Corps' Questions

The County responded to Ms. Painter's request for information by letter dated February 1, 2002, in which it addressed each of the issues that Ms. Painter had raised. A.R., at 1506-12. Without going into exhaustive detail with respect to each of those issues, the County proffered the following answers to Ms. Painter's questions. First, as to Ms. Painter's question respecting the status of the TC Interceptor, the County responded that, as of November 28, 2001, its Board of Supervisors had "eliminated the [TC] Interceptor from the County's Capital Improvement Plan ... and replaced it with the Lee Davis [Alternative]." According to the County, that meant that "all funding" for the TC Interceptor also had been eliminated, and that "[f]or all practical purposes, the project no longer exists ...." A.R., at 1506.

The County then explained the difference between two planning documents, its Comprehensive Plan and its Capital Improvements Plan which, in its estimation, had created some "confusion." A.R., at 1507. The County described the former plan, which is updated every five years, as being only "conceptual in nature [.]" It noted that not all of the improvements or projects described or portrayed in its Comprehensive Plan will, in fact, come to ***614** fruition. Rather, "[a] variety of issues could eliminate or significantly change a facility that is shown conceptually in the Comprehensive Plan." *Id.* As such, although that document

"shows facilities that are believed to be necessary to implement" the County's "smart growth" policy, it does not "precisely" locate, fund, or set the timing for such facilities, nor does it guarantee that any particular facility ever will be built. *Id.*

In contrast, the County explained, the Capital Improvements Plan "is where the [County's] Board of Supervisors actually approves funding for 'real' projects." A.R., at 1508. That is to say, potential improvement projects are included in the Capital Improvements Plan only after the Board designates specific funds for those projects, and, in the County's view, such potential projects "become actual projects" only at that time. *Id.* Thus, as noted above, it was the County's position that "[w]hen the funding was eliminated for the [TC Interceptor], it ceased to be a County project." *Id.*

The County also discussed the Shelton Pointe Pump Station, which the County had built, and begun operation of, in early 1998 "[i]n order to provide sewer service" to a portion of its SSA that ... recently had [been] phased in. [FN32] *Id.* Although it had built that pump station before "knowing the location of [the WWTP]," the County stated that, once it had done so, "it satisfied the need to provide wastewater service [to the area that the Shelton Point Pump Station serves] in support of the Comprehensive Plan." *Id.*

> FN32. The Shelton Pointe Pump Station is located near the eastern boundary of the County's SSA. The County's Water and Wastewater Facilities Master Plan reflects that, in or about 2003, the County intended to divert wastewater from that pump station to the WWTP by means of a 48 inch sewer line. A.R., at 1643. Currently, however, the Shelton

> Pointe Pump Station pumps sewage to Henrico County.

The County represented that "a sewer may never be required between Rural Point Road and the WWTP along Totopotomoy Creek, an area outside of the [SSA]. Sewage can be pumped from the Shelton Pointe Pump Station or another station to either Henrico County or to the new WWTP, if it is permitted and constructed." *Id.* The author of the February 1 letter also represented that, at the County's upcoming planning meeting, he would be "recommending that the section of the sewer line ... outside of the [SSA] be eliminated." [FN33] *Id.* Finally, he stated that:

> FN33. The author of the February 1 letter is Mr. Frank Harksen, who is the Director of the County's Department of Public Utilities.

> In terms of the [Capital Improvements Plan], I will be recommending improvements to facilities in the Lower Totopotomoy Creek Basin within the [SSA] on an as needed basis and in response to the actual development that occurs. This is just as I would do in any other part of the [SSA]. At this time, the only funding that I anticipate recommending to the Board of Supervisors during the next several years is funding for an upgrade to the Shelton Pointe Pump Station, which is essentially the replacement of pumps and motor controls which are anticipated to be needed in 2-3 years, funding for oversize credits, and perhaps improvements to allow consolidation of several pump stations in the general vicinity of Route 301 and Totopotomoy Creek.
> A.R., at 1508-09.

Next, the County responded to the Corps' request for information about certain portions of the TC Interceptor that "may be proposed by developers for new subdivisions (such as the currently proposed ***615** Bell Creek) ...." A.R., at 1575. The County explained that, as it had discussed with the Corps at the [November 9, 2001] pre-application meeting, it "expected that there would be further projects constructed by developers within the Lower Totopotomoy Creek Basin," that it "expected an application to be submitted for the Bell Creek Development in the immediate future[,]" and that it had made its design plans for the TC Interceptor available to the developer [of the Bell Creek] project "because [it] believed that [it] had selected the best alignment for any sewer project within the Totopotomoy Creek Basin." A.R., at 1509. Moreover, the County stated as follows:

> [T]he County ha[s] entered into a *development agreement* for Bell Creek and ... the proffers for the project stated *if the County did not build the [TC Interceptor], that the developer would have to build a sewer from Academy Creek to the Shelton Pointe Pump Station.* We also informed the Corps ... that the *County would be paying for part of the construction of this project in accordance with the development agreement and the County's oversizing policy.* These activities are all standard practice within the County.
>
> It is important to note that the development agreement was executed in November 2000 and the proffers ... for this project were submitted in October 2000.... The fact that the proffers recognized the fact that the County may not be building the [TC Interceptor] at this early date and the sewer service could be provided to the Bell Creek Development through the Shelton Pointe Pump Station, independent of the Totopotomoy Creek Sewer Interceptor, demonstrates the independence of these projects.

Id. (emphases supplied).

The County explained that the Bell Creek project was the "only one [it was] currently aware of[,]" and that the developer of that project had informed the County that he hoped to have the homes in that development built, and occupied, by the fall of 2002, or "long before the County will have its WWTP project operating." *Id.* [FN34] It stated that the sewer envisioned by the developer would connect to the Shelton Pointe Pump Station, "which currently pumps to a trunk sewer that eventually goes to Henrico County for treatment [,]" and that it will continue to do so unless the County's plans for the WWTP are approved, at which point sewage from the Bell Creek development could be conveyed to the WWTP. *Id.* The County also proffered the following additional information respecting the sewer project proposed by the developer of the Bell Creek project:

> FN34. According to the record, and as of April 4, 2002, the Corps has not yet acted on the application for individual permits that the developer of the project submitted. *See infra.*

> [A]lthough the Bell Creek trunk sewer is using a portion of the corridor that was originally developed for the [TC Interceptor], a 30" sewer is planned to be installed, not the 42" sewer that was proposed with the [TC Interceptor] project. The average flow capacity of this 30" sewer is approximately 4.8 [mgd] which is less than half the average flow capacity of 12.0 mgd for the 42" sewer that was once proposed by the County. The Bell Creek trunk sewer is also designed to allow the wastewater to flow into the Shelton Pointe Pump Station whereas the [TC Interceptor] was designed to accept flow from upstream of

> the Shelton Pointe Pump Station. These are obviously different projects serving different needs.... The County has no plans to construct any portion of ***616** the [TC Interceptor] nor [is the County] aware of any other active development project that would require the construction of any portion of it.
> A.R., at 1510.

Next, the County addressed the suggestion that its purchase or condemnation of land along the original intended route of the TC Interceptor evinced that, in fact, the County still intended to construct that project. The County's response was that, although forty "of the easement[s] required for the [TC Interceptor] have been purchased by the County[,]" thirteen such easements "have not been obtained." *Id.* The County explained that:

> There is not a continuous corridor for the [TC Interceptor] at this time and the County is not making any additional efforts to obtain additional easements. All of the easements that have been obtained were obtained through negotiations with property owners. No easements were condemned ... nor is there any plan to do this. The County Staff was preparing to ask the Board of Supervisors to begin condemnation proceedings for those easements that were outstanding but this was not done as the decision was made to cancel the project.
> *Id.*

The County also noted that, within the SSA, it "often obtains utility easements during the development process that may be required to serve adjoining properties. Sometimes these easements are utilized and sometimes they are not.... [T]he fact that future development within the [SSA] may be able to utilize easements within this area for pump stations or collector sewers to serve individual developments is reason

enough for the County to keep these particular easements at this time." A.R., at 1510-11. But, it explained that, if it were to become apparent that a given easement never would be used, the County would "certainly consider vacating them on a case by case basis." A.R., at 1511. [FN35]

> FN35. Mr. Harksen also explained that he saw "no reason for the County to keep the easements it obtained between Rural Point Road and the WWTP [*i.e.*, the portion of the route of the TC Interceptor that he was recommending elimination of]." *See supra;* A.R., at 1511.

Finally, the County responded to the Corps' request for information concerning "the current utility of the inflow pump station [or "IPS"] at the [WWTP] in relation to the originally proposed [TC Interceptor]." A.R., at 1575. On that issue, the County explained as follows:

> The IPS served multiple functions including pumping wastewater from the [TC Interceptor] up to the WWTP; collecting and pumping plant process waster; and collecting, grinding[,] and pumping septage [sic] delivered to the WWTP by septage [sic] hauling contractors. The Lee Davis [Alternative], which replaces the [TC Interceptor], could discharge to either the IPS or directly to the WWTP screening facilities and each discharge point has its advantages and disadvantages. At this point it appears it will be more cost effective to have the Lee Davis ... facilities discharge directly to the WWTP screening facilities therefore the IPS is no longer needed to pump wastewater to the WWTP.
>
> The County ... has decided to halt any additional IPS construction and [is] proposing to abandon it.

> Although we will no longer be constructing the IPS, the wetlands impacts for the WWTP project are ... the same because the wetlands have already been taken and construction of required drainage improvements and erosion and ***617** sediment controls will still require impacting this same area.
> A.R., at 1511-12.

ii. The Plaintiffs' Comments Respecting The "Bell Creek" Project

On February 11, 2002, counsel for the Plaintiffs sent a letter to the Corps in reference to a separate permit application that a private developer called The Hanover Group had submitted to the Corps on December 13, 2001. A.R., at 2194- 98. The Hanover Group's application sought the Corps' authorization to discharge dredged or fill material in connection with its intended construction of a mixed-use development on approximately 300 acres of land located in the northeast portion of the County's SSA. The Plaintiffs informed the Corps that the County's Planning Commission had approved plans for the "Bluffs at Bell Creek" development on June 7, 2001, and that those plans included the construction of over 7,500 feet of gravity sewer line. [FN36] The Plaintiffs also advised the Corps that over 2,200 feet of that sewer line, the construction of which was expected to result in substantial impact to wetlands, was planned to lie along the path of, and to utilize easements that the County had obtained for, the formerly proposed TC Interceptor. *Id.*

> FN36. As should be obvious, the "Bluffs at Bell Creek" (or "Bell Creek") project is the project about which the Corps inquired, and to which the County

referred, in the January 31 e-mail and February 1 letter, respectively. *See supra.*

Construction of that 2,200 feet of sewer line, the Plaintiffs contended, was essentially the same as construction of the TC Interceptor and, inevitably, will lead the County to construct additional portions of that interceptor to convey wastewater from the Totopotomoy Creek basin directly to the WWTP. [FN37] *Id.* Accordingly, the Plaintiffs urged the Corps "to look beyond the 'shell game' being played by [the] County, with the assistance (whether or not knowing) of [T]he Hanover Group[ ]" and to recognize that "[t]he TC Interceptor--and all portions of it--are the County's project [ ]" [and] must be included with the County's other sewage treatment system improvements in the County's currently pending permit application." A.R., at 2198.

FN37. Counsel opined that "once the [WWTP] is authorized and built, and a portion of the TC Interceptor is buil[t] for [the] County by The Hanover Group, the full sewer main along Totopotomoy Creek will become an inevitable means of collecting sewage and delivering it to that location." A.R., at 2198.

iii. The Review Process Comes To A Close

The record also contains a dialogue that took place through e-mail February 20, 2002 between Ms. Painter and Mr. Herzog. A.R., at 1589. First, Mr. Herzog e-mailed Ms. Painter "to verify that [the Corps] currently ha[s] all the information that has been requested from [the County]." *Id.* Next, Ms. Painter responded to remind Mr. Herzog that he

"had said [that he] wanted to provide a response to the comments submitted by [counsel for the Plaintiffs]." *Id.* She noted that, although the County was not required to comment, the opportunity to do so was available. Finally, Mr. Herzog replied as follows:

> We reviewed all the public comment letters received by the [Corps], including the letter submitted by [counsel for the Plaintiffs], on February 7, 2002 at your office. We believe that we have addressed all of the major issues associated with the permitting of these projects raised in the public comment letters that were received as of this date. These issues have been addressed by both the information provided with the original ***618** permit application and the supplemental information submitted in response to the specific questions posed by your office. We appreciate being given the opportunity to review and respond to the public comment letters but, at this time, we are not planning on addressing any particular comment letter unless the [Corps] requests it.

Id.

On March 8, 2002, however, Mr. Herzog sent another e-mail to Ms. Painter, apparently in response to a question that she had posed respecting "available capacity at Henrico and the timing of the proposed WWTP." A.R., at 1597. That e-mail states, in relevant part, as follows:

> Wastewater flows fluctuate and are highly dependent on weather. Exact predictions of sewage flow are not possible as precisely how many new customers will connect to the system and what future weather conditions will be are not known.... We believe that flows to Henrico are currently below our predictions primarily due to the dry weather conditions the entire region has been experiencing. As we are all aware, our region is currently in an extended drought but, this could change tomorrow. In 1998,

wastewater flows to Henrico were 4.5 mgd, which was approximately 500,000 gpd over our projection for that year. Since 1998 we have added over 1,500 new customers to our sewage system and currently have approximately 4,000 zoned lots in inventory that could be developed and connected to the sewer system at anytime. *Using an average daily flow of 350 gpd/unit, these 5,500 units would add 1.9 mgd to [the County's] average flow. Id.* (emphasis supplied).

e. The Corps' April 4, 2002 Memorandum For The Record

On April 4, 2002, the Corps issued the April 4 MFR, its final decisional document, in which it explained that, and why, it had verified that the County could proceed with construction of its proposed project under the authority of four NWPs (numbers 7, 12, 18, and 39). A.R., at 1-65. In the section of the April 4 MFR entitled "Findings and Decision of the District Engineer", the Corps states, in relevant part, as follows:

> The District Engineer has determined that the decision on this project is not a major Federal action significantly affecting the quality of the human environment. Therefore, no Environmental Impact Statement will be prepared. This finding is based on information contained in the [Corps'] evaluation of the project and comments received from Federal, State, and local agencies and the general public.
>
> The District Engineer has fully evaluated [the] County's application and has determined that it represents a single and complete project and that the applicant has disclosed all reasonably related activities.... The wetland impacts associated with the originally proposed [TC Interceptor] are no longer a part of the project that is before the Corps

and are not reasonably foreseeable impacts of the project. The proposed work by others along a portion of the original [TC Interceptor] alignment is not reasonably related to [the] County's project and will be evaluated by the Corps as part of The Hanover Group's application for a multi-use development. Future treatment and conveyance projects that will be developed by the County when the need arises must be reviewed for compliance with the applicable State and federal laws and approved or denied as appropriate.

The individual and cumulative wetland impacts associated with this project and ***619** minimal, and there will be no adverse effects to historic resources and no impacts to federally-listed threatened or endangered species.

A.R. at 38.

In support of its decision to verify that the project could proceed under the authority of NWPs notwithstanding that the County had submitted an individual permit application (and, accordingly, that the Corps had proceeded for several months under the regulations applicable thereto), the Corps cited 33 C.F.R. § 330.4(e)(3). That provision states: "The division or district engineer will restore authorization under the NWPs at any time he determines that his reason for asserting discretionary authority has been satisfied by a condition, project modification, or new information." The Corps explained that, "[b]ased on the results of the [December 14, 2001] field evaluation, the elimination of the [TC Interceptor] as a component of the project, and the fact that no new issues were identified in response to the Public Notice or subsequent coordination with appropriate State and Federal resource agencies that would preclude the use of general permits, the District Engineer determined that it was appropriate to consider the project under the Nationwide Permit program." A.R., at 38.

II. DISCUSSION

A. Standard Of Review

1. Principles Respecting Judicial Review Of Agency Action

A district court shall "hold unlawful and set aside agency action, findings, and conclusions found to be ... arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2). Challenges to permitting actions by the Corps, under CWA, NEPA, and NHPA, are subject to the deferential standard of review set out in the APA. *See e.g., Marsh v. Oregon Natural Resources Council,* 490 U.S. 360, 377, 109 S.Ct. 1851, 104 L.Ed.2d 377 (1989) (NEPA); *Morongo Band of Mission Indians v. Fed. Aviation Admin.,* 161 F.3d 569, 573 (9th Cir.1998) (NHPA); *Preserve Endangered Areas of Cobb's History, Inc. v. U.S. Army Corps of Engineers,* 87 F.3d 1242, 1247 (11th Cir.1996) (CWA); *Shoreline Assocs. v. Marsh,* 555 F.Supp. 169, 173 (D.Md.1983), *aff'd,* 725 F.2d 677 (4th Cir.1984) (same). The party asserting the challenge bears the burden of demonstrating that the agency's actions were arbitrary, capricious, or otherwise not in accordance with law. *See, e.g., Sierra Club v. Marita,* 46 F.3d 606, 619 (7th Cir.1995). The scope of judicial review "is narrow and a court is not to substitute its judgment for that of the agency." *Motor Vehicle Mfrs. Ass'n of the United States, Inc. v. State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29, 43, 103 S.Ct. 2856, 77 L.Ed.2d 443 (1983).

In order for its decision to satisfy this deferential level of review, however, "the agency must [have] examine[d] the relevant data and [have] articulate[d] a satisfactory explanation for its action including a 'rational connection

between the facts found and the choice made.' " *Id.; Baltimore Gas & Elec. Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 105, 103 S.Ct. 2246, 76 L.Ed.2d 437 (1983) (citations omitted). A reviewing court cannot supply the reasoned basis for the agency's action, but the court is obligated to " 'uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned.' " *Id.* (citation omitted). Thus, the court's "task is to scrutinize the [agency's] activity to determine whether the record reveals that a rational basis exists for its decision." *Natural Res. Defense Council, Inc. v. United States Environmental Protection Agency,* 16 F.3d 1395, 1401 (4th Cir.1993). If so, the court must uphold the agency's action. The agency's decisions also are due deference ***620** by the judiciary in the interpretation of the statutes that the agency administers, in the interpretation of its own regulations, and in the area of its expertise. *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984); *Christensen v. Harris Co.*, 529 U.S. 576, 120 S.Ct. 1655, 146 L.Ed.2d 621 (2000).

That said, a court's review may not serve as a "rubber stamp" to the agency's decisions, *Citizens Awareness Network, Inc. v. U.S. Nuclear Regulatory Comm'n,* 59 F.3d 284, 290 (1st Cir.1995), and situations will arise in which courts are reluctant to afford an administrative agency the full measure of deference to which it otherwise would be entitled. That is to say,

> [m]ore exacting scrutiny will be particularly useful when for some reason the presumption of agency regularity ... is rebutted, as where the agency has demonstrated undue bias towards particular private interests, ... where the agency has had a history of 'ad hoc and inconsistent judgments' on a particular question, ... where the agency has arrived at an identical result after remand from a reviewing court for

> further explanation of reasons, ... or when an agency has departed from its consistent and longstanding precedents or policies[.]

Natural Resources Defense Council, Inc. v. SEC, 606 F.2d 1031, 1049, n. 23 (D.C.Cir.1979) (citations omitted); *see also Maggard v. O'Connell,* 671 F.2d 568, 570-71 (D.C.Cir.1982) (explaining that "the deference owed to an expert tribunal cannot be allowed to slip into a judicial inertia ... and judicial intervention is required if the court becomes aware, especially from a combination of danger signals, that the (tribunal) has not really taken a 'hard look' at the salient problems, and has not genuinely engaged in reasoned decision-making.") (citations omitted).

An agency may neither "ignore evidence placed before it by interested parties[,]" *Consumers Union of U.S., Inc. v. Consumer Product Safety Commission,* 491 F.2d 810, 812 (2d Cir.1974); *Van Abbema v. Fornell,* 807 F.2d 633, 639 (7th Cir.1986), nor rely on post-hoc rationalizations or justifications in supporting its decisions, *see e.g., Motor Vehicle Mfrs. Ass'n of the United States, Inc.,* 463 U.S. at 49-50, 103 S.Ct. at 2870 (stating that "[i]t is well-established that an agency's action must be upheld, if at all, on the basis articulated by the agency itself.") (citations omitted); *Tanners' Council of America, Inc. v. Train,* 540 F.2d 1188, 1194 (4th Cir.1976); *U.S. v. Garner,* 767 F.2d 104, 116-17 (5th Cir.1985). And, in the final analysis, agencies "earn[ ]--or forfeit[ ]--deferential judicial review by [their] performance." *N.L.R.B. v. Winnebago Television Corp.,* 75 F.3d 1208, 1214 (7th Cir.1996).

2. The Appropriate Measure Of Scrutiny In This Case

Having set forth the principles applicable to judicial review of agency action, it is appropriate to consider the manner in

which those principles bear on the ensuing review of the record in this case. As noted at the outset, neither that review, nor the deferential scrutiny through which it must be undertaken, realistically can be divorced from the events that animated *Crutchfield* I (to which this case intimately is linked).

Specifically, it must be remembered that "the Corps predicated its original decision on a remarkably illogical premise, persuaded the Virginia Department of Historic Preservation to change its view on the central topic respecting how to evaluate the project, and summarily rejected the Plaintiffs' comprehensively documented contentions about the criteria for, and approach ***621** to, evaluating the project." *See Crutchfield,* 192 F.Supp.2d at 461 (*citing Crutchfield,* 154 F.Supp.2d at 898). The review of the Corps' permitting process, and decision on the merits in *Crutchfield* I, revealed that the Corps' erroneous judgment respecting the County's originally proposed project arose not merely by virtue of a mistaken interpretation of its regulations, or by a genuinely innocent oversight as to crucial facts of record. Rather, it was quite clear that the Corps, at the urging of the County, had arrived at a determination that was little more than an irrational contrivance of expediency designed for the deliberate purpose of evading the kind of environmental review that must accompany consideration of individual permit applications. *Crutchfield,* 154 F.Supp.2d at 897.

The foregoing is neither by way of condemnation nor to suggest that the settled jurisprudence respecting review of agency actions is inapplicable here. To the contrary, the Corps' decisions that presently are under scrutiny are subject to the same careful and thorough appraisal, and are entitled to the same measure of respect as to technical matters, as in

any "record review" case. At the same time, however, the tasks with which the reviewing court is charged--reviewing the administrative record as a whole, ensuring that the agency fairly considered the facts with which it was presented, confirming that the evidence rationally supports the agency's ultimate decision, and considering whether the agency's interpretation of its organic statutes and implementing regulations are consistent with both the language of those laws and the intent of Congress, logically (and legally) will be influenced by past experience in respect of the Corps' handling of a closely related situation. With that in mind, it is appropriate to turn to the issues presented by the Plaintiffs' challenge in this case, and to take a "hard look" at the administrative record as it pertains to those issues. Given the history respecting the Corps' earlier poor performance on virtually the same issues, and taking into account that the agency arrived at virtually the same decision after judicial remand, it is regrettably appropriate to assess the Corps' reasoning with heightened scrutiny. *Natural Resources Defense Council, Inc. v. SEC,* 606 F.2d at 1049; *Maggard v. O'Connell,* 671 F.2d at 579-71.

B. The Issues Presented For Review

The Plaintiffs' challenge presents the following three basic issues for review:

(1) Does the record support the Corps' decision that the County's November 16, 2001 Joint Permit Application included all activities that the County plans to undertake which are "reasonably related" to the project described therein, and, therefore, that the Joint Permit Application was "complete?"

(2) Did the Corps violate its own procedures, when, after

conducting its review of the County's Joint Permit Application under the procedures applicable to individual permits, it ultimately decided to authorize the County to proceed under the authority of Nationwide Permits?

(3) Does the record support the Corps' determination that the project for which the County applied was a "single and complete project," such that it could be authorized pursuant to multiple Nationwide Permits?

C. Analysis

1. The Corps' Decision That The County's November 16 JPA Included All Activities That Are "Reasonably Related" To The Same Project And, Therefore, Was "Complete" Within The Meaning Of 33 C.F.R. § 325.1(d)(2)

The first issue that the Plaintiffs have raised is whether the Corps reached an ***622** arbitrary, capricious, or otherwise unlawful decision respecting whether the County's November 16 JPA included "[a]ll activities which the applicant plans to undertake which are reasonably related to the same project and for which a [Corps] permit would be required[.]" 33 C.F.R. § 325.1(d)(2). Because the Corps failed rationally and independently to consider whether, in fact, the County should have included in its JPA other activities that it, and others, plan to undertake, the Corps' decision must be set aside.

a. Whether The "Reasonably Related" Requirement Of 33 C.F.R. § 325.1(d)(2) Even Applies In This Case

33 C.F.R. § 325.1(d)(2) states:

All activities which the applicant plans to undertake which

> are reasonably related to the same project and for which a DA permit would be required should be included in the same permit application. District engineers should reject, as incomplete, any permit application which fails to comply with this requirement. For example, a permit application for a marina will include dredging required for access as well as any fill associated with construction of the marina.

Both the County and the Corps argue that § 325.1(d)(2) does not apply in this case. Specifically, they contend that § 325.1(d)(2) is inapplicable because the Corps ultimately did not issue an individual permit, but, instead, verified that the County could proceed with its project under the authority of four NWPs. In support of their argument, the defendants point to a part of the decision on the merits in *Crutchfield* I in which the "reasonably related" requirement codified at § 325.1(d)(2) was held not to apply to the Corps' decisions respecting verification of NWPs. *See Crutchfield,* 154 F.Supp.2d at 895 (holding that "the 'reasonably related' requirement of section 325.1(d) applies only to applications for individual permits, not to notifications of NWPs.").

The argument made by the County and the Corps utterly ignores the facts of record in this case. To begin, it is undisputed that the Corps received, issued public notice of, and began processing, the County's November 16 JPA as an application seeking individual permits. [FN38] A.R., at 5-6. The issuance of public notice respecting that JPA (which, as stated above, occurred on December 11, 2001) lawfully could not even have occurred absent a finding that the application was "complete" (*i.e.,* that it satisfied the "reasonably related" requirement). [FN39] *See* 33 C.F.R. § 325.1(d)(2); A.R., at 2158; 2658-61. Indeed, a determination of "completeness" pursuant to § 325.1(d)(2) would have been entirely unnecessary if the Corps was not

reviewing what it considered to be an application seeking an individual permit.

> FN38. That, of course, is fully consistent with the Corps' representation to this Court that it would be reviewing the County's application as one for individual permits. *See supra.*

> FN39. In addition, counsel for the Plaintiffs suggested at oral argument that the fact that the November 16 JPA did not include a cover letter "seeking specifically and explicitly a verification" that the County could proceed with their project under the authority of NWPs, such as the County has submitted with such requests in the past, also supports a finding that the Corps was dealing with an application for individual permits. July 10, 2002, Transcript of Hearing, at 53 (hereinafter cited as "Transc., at ___"); A.R., at 1468-69.

As early as November 16, 2001, the Corps informed federal legislators that the review would be accomplished under the individual permit regime. And, as late as March 6, 2002, the Corps was representing ***623** to interested parties that it was undertaking its review of the County's application in the context of an individual permit. *See supra,* at note 26; A.R., at 2431; 2496; 2614; 2617; 2622; 2625; 2629. Finally, in the April 4 MFR (its final decisional document) the Corps presented, and attempted to support, the findings of "reasonable relatedness" and "completeness" at which it arrived pursuant to section 325.1(d)(2). A.R., at 5-6; 32-33; 38. Where, as here, the Corps clearly was undertaking its

review of the JPA under the regulatory framework applicable to individual permits, and where it represented to the Court and to the public that it was so doing, judicial review cannot simply ignore that aspect of the Corps' actions. It is disingenuous of the defendants to suggest otherwise. [FN40]

> FN40. The decision in *Crutchfield* I holds that 33 C.F.R. § 325.1(d)(2) applies when the Corps is processing applications for individual permits. Because the Corps' "reasonably related" and "completeness" decisions in this case occurred as part of its processing of an application for an individual permit, *Crutchfield* I does not support the argument that the County and the Corps advance.

In an effort to imbue this argument with a cloak of legitimacy, the defendants respond by repeating that what is under review is the Corps' *ultimate* decision--that the County could proceed under the authority of NWPs-- not some "hypothetical" decision. That argument ignores the fundamental precept that judicial review of agency action is not limited merely to the Corps' "ultimate" decision but, instead, properly extends to the process by which it arrived at that decision. That aspect of judicial review is well- settled. *See e.g., Bettucci v. United States,* 14 F.Supp.2d 45, 52 (D.D.C.1998); *Jarett v. United States,* 195 Ct.Cl. 320, 451 F.2d 623, 626 (1971); *United States v. District Council of New York City and Vicinity of United Broth. of Carpenters and Joiners of America,* 880 F.Supp. 1051, 1066 (S.D.N.Y.1995); *Maine v. Shalala,* 81 F.Supp.2d 91, 95 (D.Me.1999); *Greene v. Babbitt,* 943 F.Supp. 1278, 1285 (W.D.Wash.1996) (*citing Atkinson Lines, Inc. v. United States,* 381 F.Supp. 39, 41-42 (S.D.Ohio 1974)). It would

be inappropriate, especially in a case brought pursuant to statutory provisions that require a review of agency procedures, wholly to ignore an obvious reality respecting procedures that the Corps, itself, invoked as part of its final permitting decision. In this case, those procedures clearly involved an initial review and determination of whether the County's November 16 JPA was "complete." That determination is in no way "hypothetical." [FN41] Indeed, as is discussed in Section II.2 below, the Corps itself used this finding as part of its decision to convert the County's application for individual permits (which the County submitted in that form at the Corps' insistence) into a request for NWP verifications. Moreover, in the April 4 MFR, the Corps itself equated the "reasonably related" finding (which, of course, was the predicate for its finding of "completeness") with the "independent utility" finding that it made as part of its decision to issue the NWPs. A.R., at 6; 23; 38. *See supra.*

> FN41. In that regard, the suggestion made at oral argument (by counsel for the County) that the Corps' inclusion (at several places) in its April 4 MFR of its determination that the County's November 16 JPA was "complete," and its presentation of the reasoning underlying that determination, is mere "surplussage," cannot be accepted. Transc., at 118.

For the foregoing reasons, and notwithstanding the fact that the Corps' ultimate permitting decision took the form of NWP verifications, the review in this case properly must include assessment of the Corps' decision that the County's November 16 ***624** JPA (which sought an individual permit) was "complete" because it included "all activities which are

reasonably related to the same project." It is now appropriate to turn to that issue.

b. Whether The County's Application Included All Activities That Are "Reasonably Related" To The Same Project Which The County Intends To Undertake

A central theme of the Plaintiffs' position in this case is that, in its November 16 JPA, the County failed to include all of the activities (*i.e.*, components of its wastewater treatment system) that are underway and that it will need to undertake (*i.e.*, to construct and operate) in order to achieve the stated, paramount goal of the project--reducing its dependency on Henrico for wastewater treatment capacity. In a related argument, the Plaintiffs assert that, in making the "completeness" decision (pursuant to 33 C.F.R. § 325.1(d)(2)), the Corps ignored the fact that the Lee Davis Alternative, on its own, would not fulfill the County's avowed purpose of ensuring that it does not exceed the limit under its contract with Henrico. According to the Plaintiffs, if the Corps had opened its eyes to what appears in the record, it would have been obvious that the County's project (using the Lee Davis Alternative) will not permit the County to achieve its objective.

That issue is of cardinal significance because a valid finding that a project will have only minimal environmental impacts, and thus is eligible to proceed pursuant to an NWP, cannot be made unless all reasonably related activities, in fact, are disclosed to, and considered by, the Corps.

For the reasons set forth below, however, the Corps' decision that the County had disclosed all "reasonably related" activities, and the Corps' dependent decision that the County's JPA was "complete," must be set aside.

(1) The Corps' Finding Respecting Completeness

The record reveals that, on the basis of discussions with the County that took place on December 6, 2001, the subject of which was the County's future plans for treating wastewater generated within its borders, the Corps decided (apparently on December 10, 2001) that the County's November 16 JPA included "all reasonably related activities" that the County planned to undertake and, hence, that the application was "complete" within the meaning of 33 C.F.R. § 325.1(d)(2). *See supra.* The reasoning underlying that decision is set forth in Ms. Painter's December 10 MFR. A.R., 2656-57. It is repeated in her December 24, 2002 MFR (A.R., 2714-16) and is set forth, verbatim, in the April 4 MFR, the decisional document that is at issue here. A.R., at 5-6; 32-33; 38. As noted earlier, the Corps discussed the following considerations, and made the following findings, in support of its decision:

(1) "[a]lthough the Lee Davis [Alternative] will serve a portion of the Beaverdam Creek basin rather than the Totopotomoy Creek basin that would have been served by the [TC Interceptor], the resultant reduction in flow being sent to Henrico County will allow for continued transfer to Henrico County of sewage collected in the Totopotomoy Creek basin[;]"

(2) "the Lee Davis [Alternative] will provide wastewater flow to the [WWTP] in quantities nearly comparable to the [TC Interceptor] and will allow Hanover County to remain within its contractual limits of 5.4 mgd of treatment capacity with Henrico County for an additional 7-10 years with the anticipated 3 to 4% growth[;]"

***625** (3) "when the Lee Davis [Alternative] comes on line, flow from the existing Shelton Pointe pump station would be diverted from Henrico County to the proposed [WWTP] through the Lee Davis pump station [and][l]ater, when

warranted by development, the replacement of a portion of the proposed 16-inch pipe from the Lee Davis [Alternative] with a 20 to 24-inch pipe and other upgrades to the Shelton Pointe pump station would provide additional capacity for the Totopotomoy service area well beyond the anticipated 10-year period[;]"

(4) "[t]he County presently anticipates much less development (with less demand for sewer service) along the originally proposed [TC][I]nterceptor route than was expected when it was originally added to the Comprehensive Plan[;]"

(5) "[t]he County also indicated a new pump station for the Powhite Creek basin may be constructed as early as 2007 to pump flow to Henrico or to the new [WWTP] in order to offload more flow from Henrico in the future[;]"

(6) "[a]lthough the County does not claim that some portion of the [TC][I]nterceptor will never be built in the future by the County or others, they have stated that their more detailed evaluation does not justify spending $7 million for a new interceptor when they have much less expensive options to satisfy their needs for the next 7 to 10 years which can be phased in as needed [;]" and

(7) "[t]he County has formally withdrawn their permit application ... for the [TC][I]nterceptor and outlined a number of future options for handling sewage within the County that do not involve the construction of the [TC][I]nterceptor."

A.R., at 5-6; 32-33; 2656-57; 2714-16. On December 11, 2001, the Corps issued its notice to the public that it was considering the County's application. A.R., 2658-61.

(2) The Plaintiffs' Arguments

The Plaintiffs' argument that the Corps erred when it determined that the County's JPA was "complete" begins

with the undisputed fact that a central purpose of the project is to divert a substantial amount of wastewater from Henrico (where it presently is treated) to the WWTP, thereby forestalling what the County has characterized as an imminent risk that it will exceed the limit (5.4 mgd) of its contract with Henrico.

To understand their argument, it is important to keep in mind several other undisputed facts. First, it is agreed that (using rounded figures) the Lee Davis Alternative initially would convey .7 mgd of sewage to the WWTP. Second, it is agreed that, to determine the amount by which the County's 90-day rolling average (under its contract with Henrico) would be reduced by use of the Lee Davis Alternative, it is necessary to multiply that .7 mgd figure by a so- called "peaking factor" of 1.142. It also is agreed that, after accounting for that adjustment, the result is that the Lee Davis Alternative initially would off-load from Henrico approximately .8 mgd (as calculated on the 90-day rolling average). Third, the County posited, and the Corps accepted, that the County's need for sewage treatment capacity will grow, as its population grows, by approximately 4% per year for the foreseeable future. The Plaintiffs have not disputed that figure.

Using those undisputed figures, the Plaintiffs have undertaken certain mathematical calculations which, they assert, demonstrate that, if the only sewage that is diverted from Henrico to the WWTP is ***626** diverted by way of the Lee Davis Alternative, then the County will exceed its capacity under the Henrico contract by 2008. Given the .8 mgd quantity that the Lee Davis Alternative initially would convey to the WWTP (which, of course, is the same amount by which its flow to Henrico would be reduced), and assuming a 4% growth rate (as the County predicts), the

Plaintiffs proffer that the amount of wastewater treated under the Henrico contract will be 4.6 mgd in 2003, 4.78 mgd in 2004, 4.97 mgd in 2005, 5.15 mgd in 2006, and 5.34 mgd in 2007. The contract threshold of 5.4 mgd will be exceeded, say the Plaintiffs, in 2008. Those figures are said to reveal that the Lee Davis Alternative must be augmented by some other means of supplying sewage to the WWTP if the project is to achieve its principal objective. Because the Corps did not consider those facts, the Plaintiffs submit, its finding that the County had disclosed all activities that are "reasonably related" to the project is fatally flawed.

The County responds to that argument by asserting that the Plaintiffs intermingled sewage flows from wet and dry years and that, as a result, the Plaintiffs' calculations are skewed. The County points to a document entitled "Wastewater Demand Projections" (A.R., 1411) in which it contends that the proper flow figures may be found.

That, however, does not aid the County because, if the amounts of flow that the County anticipates the Lee Davis Alternative would off-load (taking into account both the annual 4% growth and the 1.142 peaking factor) are subtracted from the base flow figures set forth in the document upon which the County would rely, the amount of sewage that would remain to be processed under the Henrico contract would be 4.92 mgd in 2003, 5.40 mgd in 2004, 5.87 mgd in 2005, and 6.41 mgd in 2006. [FN42] In other words, the County would reach the maximum threshold under its contract in 2004 and exceed it in 2005.

> FN42. The calculations that led to those results were undertaken in the following manner: (1) the flow amount that the County predicts would be off-loaded,

in 2003, by operation of the Lee Davis Alternative (A.R., at 452) was multiplied by the 1.142 peaking factor, and the result was subtracted from the County's anticipated total (*i.e.*, base) wastewater flow for that year (A.R., at 1411); (2) for each successive year, the total amount of sewage that was calculated to be off-loaded to the WWTP during the prior year (before that total was multiplied by the peaking factor) was multiplied by the anticipated 4% annual growth rate, and the resulting figure then was "peaked" pursuant to the 1.142 factor; (3) then, that "peaked" flow amount was subtracted from the County's estimated base sewage flow for the particular year under consideration (A.R., at 1411). The final figures have been rounded to two decimal places.

The Plaintiffs take the view that, if the Corps had looked critically at the assumptions that the County was feeding to it, the Corps would have recognized that, using only the Lee Davis Alternative, the County's multi-million dollar project would not achieve the objective that the County seeks to achieve by building it. And, because the record does not reveal the existence of any additional sewage flow in the area to be served by the Lee Davis Alternative, any additional off-loading necessarily would arrive at the WWTP through other sewer lines--lines that the County did not disclose in its application. Moreover, the Plaintiffs submit, the record also reveals a good deal of information about where and when such other sewer lines likely will be built. And, in their view, the Corps ignored it all. [FN43]

FN43. The Plaintiffs suggest that the Corps

erroneously focused its attention on the putative flow *capacity* of the Lee-Davis Alternative instead of on the amount of wastewater that, *in reality,* would be available for conveyance (*i.e.,* off-loading) through that conduit. The pre-trial brief of the Corps certainly reflects that the Corps' attorneys relied on the capacity-based figures. *See* June 17, 2002, Defendant Army Corps of Engineers' Merits Brief and Brief in Response to Plaintiffs' Pre-Hearing Memorandum, at 16. With respect to the Corps' own consideration of the issue, however, the record simply is silent. *See infra.*

But, the Plaintiffs argue, it is patently unrealistic to assume that the amount of flow that the Lee Davis Alternative would off-load to the WWTP would be equivalent, or even close to, the amount that it *could* (*i.e.,* at full capacity) off-load. That conclusion is bolstered, they posit, by the following facts: (1) there is no evidence to suggest that development in the County will occur at a faster rate within the area that the Lee Davis Alternative would serve than elsewhere throughout the SSA--that is, at an estimated rate of approximately 4% per year; and (2) the area that the Lee Davis Alternative would serve constitutes approximately 3100 acres, or less than five square miles, of the County's SSA. A.R., at 451.

***627** In the Plaintiffs' view, the record reveals that the County has evaluated only two other means for diverting wastewater from Henrico to the WWTP--first, construction of the TC Interceptor, and, second, construction of another component that the parties have referred to as the "Lower Chickahominy Gravity Sewer" (hereinafter referred to as the "LC Sewer"). [FN44] According to the Plaintiffs, the County

must build and operate at least one of those additional sewer lines in the near future in order to achieve its goal of meaningfully reducing the amount of wastewater that it treats pursuant to its contract with Henrico.

> FN44. As reflected on the County's Water and Wastewater Facilities Master Plan map (the "Master Plan map"), the LC Sewer would serve the southeastern portion of the County's SSA and could convey wastewater to either the proposed WWTP or to Henrico County. A.R., at 1643. That map also depicts another sewer line, slated for operation in 2006, which the County explains is the Powhite Creek forcemain. Transc., at 140-42. The LC Sewer and the Powhite Creek forcemain run parallel to each other on the Master Plan map, and both connect the Powhite Creek Pump Station, which the Corps determined might be built as early as 2007, to the Beaverdam Creek pump station (which is the point from which the County currently pumps sewage to Henrico). Considering that the primary goal of the County's project is to off-load sewage *away* from Henrico, it is logical to assume that the LC Sewer and/or Powhite Creek Pump Station would serve that purpose--that is, that they would collect sewage for conveyance to the Powhite Creek Pump Station, which then would pump that sewage (through some other sewer line) to the WWTP. In that final regard, the Master Plan map depicts a long sewer line running north through the SSA from the Powhite Creek Pump Station up to the WWTP.

The Plaintiffs also posit that the record quite clearly

supports their position that the County actively is engaged in planning to construct the TC Interceptor (or, at least, a substantial portion thereof). Specifically, they argue that the Corps was obligated, but that it failed, fully to consider (as an activity that is "reasonably related" to the activities that the County desires to undertake) the sewer line that The Hanover Group seeks to build (in order to serve the residents of its planned development, "Bell Creek") along 2200 feet of the route that originally was intended for the TC Interceptor. They argue that, although nominally it is part of a private developer's project, that sewer line, in fact, is part of the County's public sewage system and is a portion of what was to be, and likely would become, the very TC Interceptor that the County claims to have abandoned.

In support of that argument, the Plaintiffs point to the following facts of record: (1) the County has agreed partially to finance (through a mechanism known as "oversize credits") the construction costs of the 2200 linear feet of sewer line that would serve The Hanover Group's "Bell Creek" development; (2) that sewer line ***628** will follow the precise route, and will utilize the same easements, that the County would have been used if it had been permitted to construct the TC Interceptor; (3) the County admits that, if the WWTP is completed and becomes operational, sewage from the "Bell Creek" development will be diverted there (via the Shelton Pointe pump station, which presently conveys wastewater to Henrico County); and (4) the sewer is to be constructed in accordance with the County's specifications, and, after it is complete, will be dedicated as a "public sewer main." In light of those facts, the Plaintiffs contend that construction of The Hanover Group's sewer line realistically must be viewed as part of the County's sewer system improvements (*i.e.,* as part of the County's project).

As for the LC Sewer, the Plaintiffs contend that it is the only other option (*i.e.,* besides the TC Interceptor) identified in the record for off-loading wastewater from Henrico County to the proposed WWTP. [FN45] And, the Corps found that the County intended to begin construction of the [Powhite Creek] Pump Station that would connect with the LC Sewer as early as 2007. [FN46] A.R., at 6; 2657; 2715. In their view, then, the Corps also was obligated to consider whether construction of the LC Sewer is an activity that is "reasonably related" to those for which the County sought the Corps' approval in its JPA.

> FN45. The Plaintiffs suggest that the LC Sewer would operate in the following manner:
> The [LC Sewer] would collect and off-load sewage from the Beaverdam Creek pump station [which is located in the Southeastern portion of the SSA] (the point where the County pumps sewage to Henrico County) and deliver it via a gravity sewer paralleling the Chickahominy River to a to-be-constructed Powhite Creek Pump Station ... some 3.7 miles downstream. A.R.[, at] 1643. From this new pump station, the sewage would be pumped through a forcemain ... to the proposed [WWTP].
> June 3, 2001, Plaintiffs' Pre-Hearing Memorandum, at 20. As discussed above, however, the County's Master Plan map also depicts the Powhite Creek forcemain as a potential means for conveying wastewater to the Powhite Creek Pump Station (and, through it, to the WWTP).

> FN46. At oral argument, it appeared that there is some confusion as to whether the County's plans to

> construct the Powhite Creek Pump Station have been accelerated from the 2017 date that appears on its Master Plan map, A.R., at 1643, to 2007 (as the Corps found), or, instead, whether the 2017 estimate is correct. Transc., at 140-41; 157-58; 178-82. In any event, at several places in the record, including in its final decisional document, A.R., at 6, the Corps observed that the County had informed the Corps that "a new pump station for the Powhite Creek basin may be constructed as early as 2007 to pump flow to Henrico or to the new [WWTP]."

With the Plaintiffs' arguments in mind, therefore, it is appropriate to ascertain whether the record supports the Corps' determination that the County's November 16 JPA satisfied the "reasonably related" requirement of 33 C.F.R. § 325.1(d)(2).

(3) Review Of The Agency's Determination

(i) Is The Lee Davis Alternative Sufficient?

Throughout the course of both *Crutchfield* I and this case, the County has, at every opportunity, emphasized both its imminent need for additional wastewater treatment capacity and the dire circumstances with which it will be faced if it does not obtain that increased capacity. And, anyone who is even remotely familiar with the parties' dispute would agree that, all along, the County has desired to secure its much-needed wastewater treatment capacity through reliance on a combination of treatment facilities--most notably, those in Henrico County, those that the County ***629** now operates in the Doswell, Ashland, and Hanover Courthouse areas of the SSA, [FN47] and the proposed WWTP that is the core

feature of the project at issue. Therefore, it is neither novel, nor irrational, for the Plaintiffs to suggest that, before it determined that the County's JPA was complete, the Corps was obligated fairly and honestly to ascertain whether the proposed project (as described in that JPA) could allow the County to attain the stated goal which the project was intended to achieve. Indeed, that determination would appear to have been a crucial predicate to meaningful consideration of the other fundamental issues that the Corps was called upon to consider. And, the need to assess the credibility of the County's representations as to that point should have taken on even increased significance in perspective of the events leading up to the County's submission of its revised permit application--that is, in perspective of *Crutchfield* I. [FN48]

FN47. A.R., at 426.

FN48. It must be remembered that, in *Crutchfield* I, the County's initial, and preferred, plan was stymied based upon the finding that the Corps had allowed the County improperly to "segment" the components of the project, thereby permitting it to evade the requisite regulatory scrutiny.

The Corps' decisional document, however, reflects that the Corps gave virtually no critical thought to whether the County could achieve its principal objective--off-loading enough sewage to allow it to remain within the 5.4 mgd limit of its contract with Henrico--through operation of the project as described in the County's November 16 JPA (*i.e.,* with no additional improvements). The Corps described the

"Purpose and Need of the Proposed Work" at the outset of its April 4 MFR. A.R., at 3. After stating that the County expected that it "could exceed [its] allotted sewage flow [limit under its contract with Henrico] as early as the spring of 2003," and that it "will need to provide additional treatment capacity to accommodate [its] anticipated 3 to 4% growth for the next 7 to 10 years[,]" the Corps discussed the purported solution to that problem--the Lee Davis Alternative. *Id.* The Corps explained that:

> The proposed Lee Davis [Alternative] will replace the previously proposed [TC Interceptor] as the initial source of wastewater supply for the proposed [WWTP] in quantities nearly comparable to the [TC Interceptor]. The reduction in the flow being sent to Henrico County by the construction of the Lee Davis [Alternative] will allow for the continued transfer to Henrico County of sewage flow collected in the Totopotomoy Creek basin. As needed in the future, other wastewater conveyance projects will connect to the [WWTP].
>
> *Id.*

That conclusory remark was not based on, or supported by, a critical assessment of the facts of record respecting whether the project--as presented and without other sewage supply lines--would permit the County to meet its goal. Neither the April 4 MFR, nor any other document included in the administrative record, reflects that the Corps gave any real consideration to the position in which the County would find itself (in terms of approaching or exceeding its limit under its contract with Henrico) if the WWTP were to become operational at .8 mgd and remain at that level (factoring in the anticipated 4% annual growth) for the foreseeable future (*i.e.,* without sewage from elsewhere).

As the Plaintiffs point out, the Corps did not even consider

whether the collection and conveyance lines feeding the Lee
*630 Davis forcemain would supply sufficient sewage thereto in order to permit it to operate at any level above approximately .8 mgd. If, as the Plaintiffs assert, there is no additional flow available for conveyance through the Lee Davis forcemain to the WWTP, then .8 mgd is not only the initial flow, but it is also the maximum flow, that will be off-loaded thereby until additional sewer lines are built to divert more sewage to that facility. At that level of off-loading, and in perspective of the anticipated 4% annual growth rate, the County likely would exceed the limit on its contract with Henrico in the near future, perhaps as early as 2005. *See supra* at 626.

As noted, however, the record contains no evidence that the Corps engaged in any calculations of the sort in which the Plaintiffs engaged (when they attempted to demonstrate the shortcomings of the Corps' decision), or in any critical assessment whatsoever of that fundamental issue. Instead, the record contains merely the conclusory assertion that "the Lee Davis [Alternative] will provide wastewater flow to the [WWTP] in quantities nearly comparable to the [TC Interceptor] and will allow Hanover County to remain within its contractual limits of 5.4 mgd of treatment capacity with Henrico County for an additional 7 to 10 years with the anticipated 3 to 4% growth." A.R., at 5-6. Considering that, in *Crutchfield* I, the Corps' decision was found deficient because of the talismanic invocation of both regulatory language and unsupported statements made by the County, its present failure critically to examine this fundamental postulate of the County's position is especially egregious (not to mention arbitrary, capricious, and otherwise not in accord with law).

Indeed, the Corps' conclusion, whether or not correct, simply

parrots the positions asserted by the County (and which Ms. Painter repeated in her December 10 and 27, 2001 MFRs) after its December 6, 2001 meeting with the County representatives. A.R., at 2656-57; 2715. That conclusion, of course, is the very basis underlying the Corps' finding that the County's November 16 JPA included all "reasonably related" activities and, therefore, was "complete."

Thus, here, as in *Crutchfield* I, the Corps simply accepted what the County had to say and, as a result, paid no attention at all to whether, in fact, the project (as described in the JPA) would permit the County to off-load enough sewage from Henrico to the WWTP so that it could remain within its contractual limit for seven to ten years. And, as explained above, the Plaintiffs have made a strong showing that precisely the opposite is true--that is to say, the Plaintiffs convincingly have demonstrated that, even if the project that is presented in the County's JPA became fully operational, the County likely would exceed its contractual limit in 2008. And, the record strongly suggests that the contractual threshold may be exceeded as early as 2005.

At oral argument, counsel for the County proffered his own estimates of what impact the project, as presented, likely would have on the County's contractual limit. Counsel arrived at very different conclusions than those that the Plaintiffs reached. Counsel twice led the Court through his own series of calculations, and he concluded that operation of the project would allow the County to off-load enough sewage from Henrico to the WWTP so as to remain safely within its contractual limit for at least ten (and perhaps as many as seventeen) years. Transc., at 146-47; 166-67.

In an effort, to review the record on this issue, and to rid the process of criticisms ***631** levied by the County at the

Plaintiffs' calculations, the Court undertook an independent assessment using the County's sewage treatment demand figures and other, undisputed factors. *See supra,* at 624 - 626. That exercise suggests that the County will exceed its maximum contracted capacity (5.4 mgd) in 2005.

At oral argument, counsel for the County suggested that the Plaintiffs' math is "no better" than the County's. Transc. at 207-08. That may be true. Further, it certainly would be foolhardy to assert that the Court's math is better than that of either party. The fact of the matter is that the subject that is at issue is technical and the calculations in which the parties have engaged require some degree of expertise. That is to say, they are the sort of issues upon which courts are instructed to defer to the agency's findings. Such deference is impossible, however, when the record is completely devoid of findings on the relevant topic, where the agency's decisional document merely restates, verbatim, conclusions that the project proponent supplied to the agency, and where the only calculations presented are those in which the (obviously self-interested) plaintiffs and project proponent have engaged.

Thus, the point is not whether the Plaintiffs, and the County, have done their math correctly; the point is whether the Corps has done it correctly, and, even more directly, whether it has done the math at all (or, in any other way, has examined this fundamental issue). The record in this case reflects that the Corps has not done so. Indeed, at oral argument, counsel for the Corps conceded that, at least "to some extent," the Corps merely "rel [ied] on the County's representations" respecting the amount of flow that the Lee Davis Alternative would be able to off-load and the consequent effect on the contract with Henrico. [FN49] Transc., at 98. In perspective of the events that have led the

parties to the point at which they now find themselves, and considering the decisions in *Crutchfield* I, the Corps was obligated to do more than that.

> FN49. When pressed, counsel for the Corps simply was unable to point to any document in the voluminous administrative record that evinces independent, critical inquiry into the issues at hand (*i.e.*, the amount of wastewater that the Lee Davis Alternative will be able to off-load and the impact on the County's contract with Henrico thereof) on the part of the Corps. Transc., at 67-114. It suffices to say that the Court has been unable to find any such document either.

The foregoing analytical deficiency, in an area of obviously critical importance, renders the Corps' findings (or lack thereof) arbitrary and capricious. It is well-settled that agency action is "arbitrary and capricious if the agency has ... entirely failed to consider an important aspect of the problem." *Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 43, 103 S.Ct. 2856, 2867, 77 L.Ed.2d 443 (1983), *see also Yousefi v. INS*, 260 F.3d 318, 329 (4th Cir.2001).

(ii) The Corps' Consideration Of The TC Interceptor

Whereas the record is devoid of any or proof that the Corps considered whether the project, as presented by the County, realistically would off-load enough sewage to the WWTP to relieve the County's impending wastewater treatment crisis, the same is not true of its consideration of the Plaintiffs' assertion that the County still intends to build the TC

Interceptor. Rather, and as set forth above, the Corps devoted substantial verbiage in its April 4 MFR to the Plaintiffs' concerns respecting whether, in fact, the County has abandoned its plans to build the TC Interceptor. ***632** The Corps also paid some measure of attention to the sewer line for which The Hanover Group has sought a permit in conjunction with its "Bell Creek" project. Closer scrutiny, however, reveals that the Corps rather blindly accepted the County's representations as to several key issues and, again, failed independently and critically to assess those issues.

Both before and after its decision that the November 16 JPA was "complete," the Corps considered whether the County still intended to construct the TC Interceptor as originally planned. It appears that the Corps first became aware of the Plaintiffs' concerns after Ms. Painter read the November 29 brief that they had filed in *Crutchfield* I. Thereafter, in his December 7, 2001 letter to Ms. Painter, counsel for the Plaintiffs suggested that the Corps needed seriously to consider that issue by asserting that "[t]he most obvious activity excluded from the [County's] application is the County's plans for construction of the [TC Interceptor]." A.R., at 2156.

The Corps then sought information respecting the TC Interceptor during its December 6 meeting with representatives from the County. As discussed above, that meeting is the subject of two separate MFRs in which Ms. Painter reports certain statements that the County's representatives had made concerning the TC Interceptor. *See supra;* A.R., at 2656-57; 2714-16. Even a cursory review of the Corps decision that the County's JPA was "complete" reveals that those statements, proffered by the County, and accepted as fact by the Corps, are the sole basis upon which the Corps rested that crucial finding. That is

borne out by the fact that precisely the same language and reasoning (and no other) appears at the relevant pages of Ms. Painter's two December MFRs as appears in the final, April 4 MFR that is under review. The Corps simply repeated what the County had told it and, without any citation of support in the record, and without any additional explication as to the logic, or the merit, of the County's assertions, accepted each one of those assertions as true.

Again, in view of everything that had transpired in *Crutchfield* I, and faced with substantive objections on the part of the Plaintiffs (whose objections to the original permit proceedings--at issue in *Crutchfield* I--by this time had been proven meritorious), the Corps was obligated to give the issues a hard look. The issue respecting the County's intentions as to, and the status of, the TC Interceptor is linked to the question whether, at .8 mgd, the flow of sewage through the Lee Davis forcemain would permit the County to remain within the Henrico contractual limit because, if that is not the case, then the County would need to convey additional flow through other sewers leading to the WWTP (*i.e.,* to off-load that sewage from Henrico). One obvious alternative is the TC Interceptor, either as originally planned or as modified. Uncritical, unthinking acceptance of the County's statements at the December 6 meeting (and thereafter) led the Corps to believe that the TC Interceptor was no longer part of the picture. The record, however, contains substantial indicia that part of the TC Interceptor, in other garb, presently is being built by The Hanover Group. *See infra.*

What is even more troubling is the fact that, after it made its decision that the JPA was "complete," and after it issued public notice thereof, the Corps had every opportunity to augment, or to amplify, its findings. That is because the

Plaintiffs continued to press the Corps on the same issue--that the County was not being fulsome in disclosing its true intentions respecting the TC Interceptor. Indeed, in ***633** his January 25, 2002 letter to the Corps, counsel for the Plaintiffs articulated in great detail the reasons why he believed that the County still planned to build some, or all, of the TC Interceptor. A.R., at 1613-21. Among other things, counsel pointed out that The Hanover Group was seeking to build a substantial portion of sewer pipeline in the exact path of the "abandoned" TC Interceptor, using the County's easements, to the County's specifications, and with a partial reimbursement from the County. *Id.*

It does appear that the Corps at least set about to investigate, and to obtain additional information respecting, that issue (as well as some other issues). Thus, as discussed above, Ms. Painter requested information by way of a January 31, 2002 e-mail, and the County responded to that request by letter dated the following day. A.R., at 1575; 1506-12. Later, on February 11, 2002, the Plaintiffs again stated their contentions respecting The Hanover Group's "Bell Creek" project. A.R., at 2194-98. Accordingly, it appears that the Corps had a good deal of evidence as to some aspects of the Plaintiffs' challenge.

But, as noted, scant mention of The Hanover Group's project appears in the section of the April 4 MFR that articulates the Corps' decision that the County's JPA was "complete." The defendants correctly point out that the Corps did mention the "Bell Creek" project in the "Cumulative Impacts" section of the April 4 MFR. [FN50] There, the Corps made the following findings, stated in relevant part:

FN50. In addition, in the section of that MFR entitled

> "Findings and Decision of the District Engineer," the Corps explained that "[t]he proposed work by others along a portion of the original [TC Interceptor] alignment is not reasonably related to [the County's] project and will be evaluated by the Corps as a part of The Hanover Group's application for a multi-use development." A.R., at 38.

The Bell[ ] Creek development ... would utilize a portion of the [TC Interceptor] alignment. The developer anticipates having houses constructed and occupied by the fall of 2002. The sewer line serving the Bell Creek development would consist of approximately 9,700 linear feet of pipeline from the development to the existing Shelton Pointe pump station that currently pumps to ... Henrico County for treatment. However, sewage from the Bell Creek development will eventually be pumped to [the WWTP], if it is approved and constructed.... *[A]pproximately 2,200 feet of 30-inch sewer line would be constructed along the same ... alignment that the [TC Interceptor] would have followed. The current application proposes a permanent loss of 2.09 acres of wetlands[.]* The review of this project and its impacts has not yet been completed. While this portion of the Bell Creek sewer line is proposed to occupy the original sewer easement obtained by Hanover County for the [TC Interceptor], [it] will be a 30-inch line capable of carrying approximately 4.8 mgd of flow. The [TC Interceptor] would have been a 42-inch line with a flow capacity of 12 mgd. The Bell Creek sewer line is sized to serve The Hanover Group's development and would not serve the same function as the originally proposed [TC Interceptor].... Hanover County has stated that [it has] no plans to construct any portion of the [TC Interceptor][.] A.R., at 19-20 (emphasis supplied).

The record reflects that the Corps was well aware of The Hanover Group's contractual relationship with the County. For example, the record includes a Statement of Proffers that was drafted in connection with the re-zoning of County land for the ***634** "Bell Creek" project. A.R., at 1656. Section 10 of that Statement of Proffers, entitled "Extension of Utilities," includes the following language:

> The Applicant shall *design and construct a public sewer main* from the confluence of the Totopotomoy and Strawhorn Creeks to the north west corner of [the] property. Subject to standard County policies regarding oversizing credits, the Applicant *shall size such main to accommodate development of adjacent properties as may be determined by the Director of Public Utilities.* Further, in the event that a sewer main has not been extended from the aforesaid confluence eastward to the Shelton Pointe Pump Station at the time of such construction, the Applicant shall construct such sewer extension, and *shall be entitled to credit therefor* in accordance with policies established for such extensions.

Id. (emphases supplied). Moreover, the Plaintiffs fully had apprised the Corps of the facts that The Hanover Group's sewer was to be built (1) in exactly the same path in which the TC Interceptor would have been built, and using the easements that the County obtained when it intended to build the TC Interceptor; (2) to the County's own specifications; (3) for the purpose of conveying wastewater from the "Bell Creek" development to the County's WWTP, if that treatment plant was built; and (4) in part, with a reimbursement from the County in the form of oversize credits. [FN51] Finally, when completed, the sewer would be a public sewer owned by the County.

FN51. At oral argument, counsel for the County

> explained the nature and purpose of oversize credits. Without going into exhaustive detail on that topic, oversize credits are reimbursements paid by the County to private developers who desire to take advantage of the County's extant utilities infrastructure. When a developer seeks to connect his project to the County's public sewer system, the County charges that developer a connection fee. An oversize credit is an allocation of the cost of building materials actually used (by such a developer), which the County credits against the developer's connection fee. No cash changes hands, per se. Oversize credits are awarded when developers connect to the public utility system by constructing a connection (*i.e.,* a sewer pipe) that is larger than that which the developer itself would need. Thus, the system of oversize credits serves to partially reimburse developers for adding components to the public utility system that the County, or other developers, later may utilize. The County asserts that this system, authorized in its ordinances, reflects and facilitates efficient and orderly governmental planning. Transc., at 133-37.

Remarkably, the Corps' decisional document contains no reasoned analysis of those realities. To the contrary, and as noted above, the Corps failed critically to assess The Hanover Group's project when deciding whether the sewer line contemplated by that developer is "reasonably related" to the County's project. Moreover, when the Corps did consider the "Bell Creek" project, it concluded that, because the sewer that would serve that development was to be made of 30-inch pipeline, rather than the 42-inch pipeline out of which the TC Interceptor would have been wrought, the two

sewers would not serve the same function. It was on that frail basis, as well as upon the County's representations that it has no plans to construct the TC Interceptor, that the Corps disposed of that aspect of the Plaintiffs' challenge.

That conclusion cannot be considered the product of sound reasoning. In fact, it cannot even be viewed as a genuine attempt to assess what were, and are, undisputed facts of record that demand serious attention. The inexplicable absence from the "reasonably related" section of the ***635** Corps' April 4 MFR of any meaningful discussion respecting The Hanover Group's sewer project appears especially stark in light of the fact that the Plaintiffs consistently pressed the Corps on that issue. And, in light of all the evidence that the Plaintiffs proffered (demonstrating that The Hanover Group's sewer is, indeed, very "related" to the County's TC Interceptor), the Corps' bare conclusion that those two sewer lines "would not serve the same function" is too simplistic to pass muster under even the most deferential review.

In truth, the two sewer lines would serve precisely the same function--that is, conveying wastewater from the Totopotomoy Creek basin to the WWTP--only they would do so in different amounts and one--the "Bell Creek" sewer--would traverse substantially less ground. The fact that the pipe out of which The Hanover Group's sewer would be built is smaller than that out of which the TC Interceptor would have been constructed is insufficient to permit the Corps to find that those two patently similar projects were not "reasonably related." That is especially true where, as explained, the Plaintiffs had urged the Corps to look at the bigger picture--*i.e.,* to realize that, even though it nominally is a "private developer's project," The Hanover Group's sewer, practically speaking, is part of the County's own wastewater treatment system. Faced, as it was, with the

aforementioned facts and with the Plaintiffs' arguments, the Corps certainly should have taken a long, hard look at that issue. Its conclusory assertion at page 38 of the April 4 MFR that "[t]he proposed work by others along a portion of the original [TC Interceptor] alignment is not reasonably related to [the County's] project[,]" is patently insufficient.

(iii) Did The Corps Properly Consider The Plaintiffs' Concerns Respecting The LC Sewer?

Similarly, the Corps simply glossed over, and then echoed, the County's statement that a new pump station in the Powhite Creek basin might be built as early as 2007. The record is devoid of any indication that the Corps was concerned with, or undertook any critical analysis of, the significance of that fact. That omission is particularly glaring because the County's Master Plan map indicates that the project known as the "Powhite Creek Pump Station", which would be constructed near the southeastern boundary of the SSA, was not scheduled to be constructed until 2017, ten years later than the date referred to in the April 4 MFR. Moreover, the decision on the merits in *Crutchfield* I expressly recognized the "undisputed fact[ ]" that "the Powhite Creek Pump Station interceptor line is not scheduled to go online until 2017, if then." *Crutchfield,* 154 F.Supp.2d at 896. Against that backdrop, it is remarkable that the Corps, confronted with a defined aspect of the County's long-term wastewater treatment plan that, now, appears to have been accelerated by ten years, did not inquire into the timing and impacts of that project.

Another fact of significance to which the Corps paid no heed is that a pump station is of no utility standing alone. Its value exists in forcing sewage from one point to another. Thus, obviously, sewage must be conveyed to the pump

station and then away from it. It is not unreasonable to expect the Corps, with its expertise, to have understood that fact.

If, however, the Corps grasped the significance of the fact that a new pump station was to be built by 2007, not to mention the fact that its construction had been advanced by 10 years, the April 4 MFR does not disclose any such awareness. ***636** A reasonably alert agency would have probed into where the sewer lines would be located en route to that pump station and how, if at all, the pumped sewage would be conveyed to the WWTP. Moreover, given that the pump station was to be built by 2007, one would have expected the Corps to inquire whether a Corps permit would be required for such a project and (if it were likely that a permit would be required) when, in the five years between now and 2007, an application therefor might be filed. And, it would not have been untoward of the agency to ask whether the designs for that pump station had been started or were complete.

But the Corps did not ask questions of that ilk, or otherwise inquire into the matter. Instead, it simply accepted the County's statements, "cut and pasted" them into its decisional document, and declared that the November 16 JPA included in it "[a]ll activities which the applicant plans to undertake which are reasonably related to the same project and for which a DA permit would be required[.]" *See* 33 C.F.R. § 325.1(d)(2).

That conclusion entirely ignores the Powhite Creek Pump Station itself, the means through which sewage would be conveyed to and from it, and the location to which it would convey sewage. As noted above, the record reflects that the County has conceived several possible conduits that it might

connect to the Powhite Creek Pump Station. A.R., at 1643. The first of those is a forcemain through which sewage could be off-loaded from Henrico, to the Powhite Creek Pump Station, and, ultimately, north to the WWTP. The record indicates that the construction of that forcemain might take place as early as 2006. *Id.* At oral argument, however, counsel for the County asserted that there is "nothing in the record that indicates that this force main, which can be built right by the road or in the right of way of the public roads, would have any environmental impacts." Transc., at 141. That may be true, but it was up to the Corps to ascertain whether wetlands impacts were possible and then, if appropriate, to conclude that none would occur. So far as the record discloses, the Corps made no inquiry into that issue.

Another conduit that appears in the record is the LC Sewer, which, it seems, would operate in much the same manner as the forcemain described above. The record discloses a strong likelihood that construction of the LC Sewer would engender substantial wetlands impacts because, for most of its extended length, that sewer would lie very near the banks of the Chickahominy River. [FN52] And, although the County and the Corps correctly note that the record generally is undeveloped on that issue, neither defendant disputes the Plaintiffs' basic point--*i.e.*, that construction of the LC Sewer, if and when it does occur, would result in significant wetlands impact. Finally, other conduits appear on the County's Master Plan map and, although it is unclear precisely how such conduits would operate, or what purposes they might serve, they clearly are contemplated to connect to the Powhite Creek Pump Station.

FN52. The County's Master Plan map reflects that the

> LC Sewer would consist of roughly 18,000 linear feet of 36-inch sewer line which, at several points, would cross over (or abut) various streams and tributaries.

The Corps engaged in no discussion of those various conduits, let alone articulate any findings with respect thereto. It stated, quite simply, that "a new pump station for the Powhite Creek basin may be constructed as early as 2007 to pump flow to Henrico or to the [WWTP] in order to ***637** offload more flow from Henrico[.]" A.R., at 6. Later, when discussing "Other Options to Handle Sewage in the Future," the Corps articulated the same statement and noted that sewage collected from the Powhite Creek basin "would initially be pumped to Henrico County." A.R., at 23. Having acknowledged that the County's plans included construction of the Powhite Creek Pump Station in 2007 (ten years earlier than was the case when the Corps considered the project in 2000), the Corps ignored several basic questions, including: (1) how was the sewage to get to the Powhite Creek Pump Station; (2) how would it be conveyed to the WWTP (or to Henrico); and (3) what, if any, wetlands would be affected by building those sewage conduits. And, fully aware of the length of time necessary to design, to obtain rights of way and permits for, and to construct sewage lines, the Corps did not even ascertain when the County would need to initiate those types of activities if (as the Corps found) the Powhite Creek Pump Station was to be constructed as early as 2007.

The Corps' silence is especially stark given that it acknowledged, at a minimum, the possibility that the role of the Powhite Creek Pump Station would be to offload sewage from Henrico and to the WWTP. [FN53] Therefore, just like The Hanover Group's "Bell Creek" sewer project, the

Powhite Creek forcemain, and the LC Sewer, though they may be constructed at various times in the future, are mechanisms that will enable the County to achieve the precise goals that it has set for its *current* project. The Corps was obligated to give that serious attention in assessing whether the County had disclosed all activities reasonably related to the project presented in the November 16 JPA. But, as noted, the Corps failed to do so.

> FN53. Indeed, and as noted above, in perspective of the County's expressed goal of offloading sewage *away from* Henrico and to the WWTP, it is highly unlikely that the County would employ the Powhite Creek Pump Station to send the sewage collected in the Powhite Creek basin *to* Henrico County. To do so would be to exacerbate the strain that the County is experiencing under its contract, and that would run directly contrary to its goals.

(iv) Summary

The County and the Corps seem to advance the view that all of the aforementioned failures are insignificant technicalities because the Corps ultimately issued NWPs, which do not require the "reasonably related" and "completeness" findings mandated by 33 C.F.R. § 325.1(d)(2). As stated above, that reasoning ignores reality and cannot be embraced.

The purpose of § 325.1(d)(2) is to assure that, before the Corps makes any decision respecting an application for an individual permit-- including whether to convert that application into a request for verification of NWPs--the Corps is aware of all possible wetlands impacts. That

awareness is perhaps most important when the Corps actively is considering whether to allow the application to proceed as an NWP verification request, free from the stringent environmental review called for by the regulatory scheme applicable to individual permits.

The criteria to be applied in that circumstance is whether the wetland impacts that the project would cause would be greater than "minimal." If not, then an NWP can be considered. If so, then the individual permit process must go forward. It is impossible for the Corps to make a defensible finding on that issue unless and until it examines all activities that are "reasonably related" to the project.

The Corps is obligated carefully to scrutinize an application, and its associated ***638** documents, for obvious indicia that the applicant may have not disclosed such activities. And, at least where, as here, an interested party has pointed to several such indicia, the Corps is not entitled merely to rely on what the applicant says in response. Rather, the Corps is required to use its expertise to examine the record and to pay close attention to details and data therein that contradict, call into question, or confirm, the applicant's responses. Then, the Corps must articulate its reasons, not in conclusory terms, but in a sensible fashion that is firmly grounded in the facts of record. That is especially appropriate when, as here, the Corps' previous decision has been found wanting on account of its uncritical acceptance of the applicant's representations and its conclusory, but illogical, reasoning.

In sum, and for all of the reasons stated above, the Corps' decision that the County's November 16 JPA disclosed "[a]ll activities which the applicant plants to undertake which are reasonably related to the same project and for which a [Corps] permit would be required" was arbitrary, capricious

and otherwise not in accordance with law. As a result, the Corps' decision that the County's JPA was "complete," which depends for its validity on the "reasonably related" finding, also is legally deficient.

2. The Corps' Unexpected Decision To Verify That The County Could Proceed Pursuant To The Authority Of NWPs

The second basis upon which the Plaintiffs attack the Corps' decision is that, having represented that it would process the County's revised JPA under the regulations applicable to individual permits, and having actually set about to proceed in that manner, the Corps' unexpected decision to verify that the County could proceed under the NWP program was not in accordance with law. Again, the Plaintiffs are correct.

a. A Review Of The Facts

A brief review of the facts is in order before turning to the parties' arguments respecting whether, having largely completed its public interest review of the County's project under the regulatory scheme applicable to individual permits, the Corps was authorized to change course and verify that the County could proceed under NWPs. The first salient fact is that, on September 25 and October 2, 2001, the Corps informed the County and the Court, respectively, that it had decided to "address all components of the project in a single permitting action and [to] do so in the context of an application for an individual permit rather than a request for an NWP authorization." [FN54] The context in which the Corps reached that decision, of course, included this Court's August 14 opinion setting aside the Corps' previous permitting decision and remanding the matter to the agency for further proceedings. It also included an upcoming

hearing respecting the Plaintiffs' motion for injunctive relief pending remand. The Corps explained that its decision was based "on a number of factors, including a reevaluation of the permitting procedures that would be most appropriate in light of the Court's decision." At the pre-application meeting on November 9, the Corps directed the County to submit an individual permit application. And, as acknowledged at oral argument by counsel for the County, in presenting its application, the County desired to proceed in accord with the Corps' decision to treat the November ***639** 16 JPA as one seeking an individual permit. Transc., at 120- 21.

FN54. *See supra,* note 9.

The next important fact is that, on November 16, shortly after entry of the permanent injunction in *Crutchfield* I (prohibiting the County from working on its project while the matter was on remand), the County submitted its revised permit application. The project described in that application was different in one significant respect than the project that the Corps originally had considered (*i.e.,* the County had replaced the TC Interceptor with the Lee Davis Alternative). That application (unlike the one for which the Corps verified the NWPs that were at issue in *Crutchfield* I) was not accompanied by a cover letter requesting that the Corps "verify" (a term of art in the Corps' permitting vernacular) that the County could proceed under the authority of NWPs. To the contrary, it appears generally to have been understood that, initially, the Corps intended to process the County's November 16 JPA as an application seeking individual permits.

As a harbinger of things to come, also on November 16, the Corps' District Engineer, Colonel Hansen, mailed a letter to two federal legislators in which he disclosed a position of which neither the Plaintiffs nor the public were made aware. Colonel Hansen told those legislators, although "[p]reliminary information received at a pre-application meeting with the County ... indicates that the wetland impacts of these activities may indeed be minimal and [that] the project may qualify for Nationwide permits[,] ... the District's decision to assert discretionary authority in light of the recent litigation, is based on the need to evaluate all segments of the project, as well as alternatives to the project, as a whole." A.R., at 2404. Thus, the record reflects that, even at that early stage (*i.e.,* before the County even had submitted its revised JPA), and notwithstanding its representations to the Plaintiffs and to the Court, the Corps seriously was considering whether the County could proceed under the authority of NWPs. [FN55]

> FN55. That kind of duplicity is unacceptable and, in this case, it (along with the agency's conduct as described in *Crutchfield* I) is one of the reasons that the Court has reviewed the conclusory assertions in the Corps' April 4 MFR with an increased level of scrutiny.

Nonetheless, the Corps proceeded to undertake its evaluation of the County's JPA in accordance with the regulations applicable to individual permits. *See supra.* It decided that the application satisfied the "reasonably related" requirement set forth at 33 C.F.R. § 325.1(d)(2), issued public notice, received public comment, represented to interested parties that the County's project was under review

for an individual permit, and solicited the input of various other administrative agencies. None of that would have been necessary, or appropriate, if, all the while, the Corps had been convinced that the project qualified for NWPs.

Then came the December 14, 2001 field visit, after which Ms. Painter concluded that "the magnitude of the proposed and completed impacts to wetlands and waters of the U.S. are minimal and could be authorized by general permits." A.R., at 2677. Neither the Plaintiffs nor the Court were informed of that conclusion, which, as noted, was "preliminary" and "contingent" upon the receipt of information and input from various other sources.

The record indicates that, over the next few months, while the Corps (internally) was actively considering the possibility of verifying that the County could proceed under the NWP program, the Plaintiffs were submitting their comments and operating under the justifiable assumption that ***640** the Corps was still evaluating the JPA under the individual permit program. A January 29, 2002 internal e-mail discusses "[t]he Colonel's [*i.e.*, the District Engineer's] desire ... that if the project qualifies for a NW then it should be authorized as such[,]" and reveals that the Corps plan was to "go ahead and complete the environmental and public interest review ... [and] use the results of the analyses to document that either the project has only minimal impacts ... or show that the impacts are more than minimal." A.R., at 2854.

Finally, after completing its public interest review (as planned), the Corps issued its April 4 MFR, in which, of course, it concluded that the County could proceed under the authority of four NWPs. The April 4 MFR contains scant discussion of the process, or authority, by which the Corps

had shifted from the individual, and to the Nationwide, permitting regimes. The sole justification that the Corps cited in support of that shift is 33 C.F.R. § 330.4(e)(3). The Corps explained that:

> Based on the results of the [December 14, 2001] field evaluation, the elimination of the [TC Interceptor] as a component of the project, and the fact that no new issues were identified in response to the Public Notice or subsequent coordination with appropriate State and federal resource agencies that would preclude the use of general permits, the District Engineer determined that it was appropriate to consider the project under the Nationwide Permit program.

A.R., at 38. Having considered the project under the NWP program, the Corps then determined that it qualified for authorization under a combination of NWPs.

With that time-line in mind, it is appropriate to consider the regulation that the Corps relied upon to support, and the parties' arguments respecting, the switch from the individual permit mode to the NWP mode.

b. The Authority Cited By The Corps For Shifting Procedures

According to the April 4 MFR, the Corps relied on 33 C.F.R. § 330.4(e)(3) as the authority pursuant to which it could abandon the individual permit procedure, upon which it had insisted since September 25, 2001, and in which it had been engaged since November 16, 2001, and shift to the NWP procedures. That regulation, which is found in the Corps' rules respecting the Nationwide Permit Program (33 C.F.R. Part 330) provides:

> The Corps reserves the right (i.e., discretion) to modify, suspend, or revoke NWP authorizations. Modification

> means the imposition of additional or revised terms or conditions on the authorization. Suspension means the temporary cancellation of the authorization while a decision is made to either modify, revoke, or reinstate the authorization. Revocation means the cancellation of the authorization. The procedures for modifying, suspending, or revoking NWP authorizations are detailed in § 330.5.
> (3) The division or district engineer will restore authorization under the NWPs at any time he determines that his reason for asserting discretionary authority has been satisfied by a condition, project modification, or new information.

As defined at 33 C.F.R. § 330.2(g), "[d]iscretionary authority means the authority described in §§ 330.1(d) and 330.4(e) which the Chief of Engineers delegates to division or district engineers to modify an NWP authorization by adding conditions, to suspend an NWP authorization, or to revoke an NWP authorization and thus require individual permit authorization."

***641** 33 C.F.R. § 330.1(d) expands on that definition. It states:

> Discretionary authority. District and division engineers have been delegated a discretionary authority to suspend, modify, or revoke authorizations under an NWP. This discretionary authority may be used by district and division engineers only to further condition or restrict the applicability of an NWP for cases where they have concerns for the aquatic environment under the Clean Water Act section 404(b)(1) Guidelines or for any factor of the public interest.

The concept of discretionary authority, as created and defined by those regulations, affords the Corps a substantial

degree of flexibility in managing the NWP program. The question here, however, is whether that concept, and, in particular, section 330.4(e)(3), authorized the Corps to do what it did here--that is, to abandon the individual permit process and shift to the NWP regime.

(1) The Parties' Arguments

The Plaintiffs argue that the concept of discretionary authority is inapplicable in this case because "(1) the district engineer did not receive a NWP verification request for [the County's] project in the first place; (2) the district engineer never exercised discretionary authority to convert a NWP verification request into an individual permit application; and (3) it therefore was not possible to "restore" authorization under the NWPs." June 3, 2002, Plaintiffs' Pre-Hearing Memorandum, at 32. In the Plaintiffs' opinion, the process by which the Corps undertook its review of the County's November 16 JPA--treating the JPA as an application for individual permits, engaging in a four month-long public interest review, and then suddenly announcing that the project could proceed under NWPs--reflects a deliberate effort to evade proper regulatory review.

Specifically, the Plaintiffs contend that the very reason why the Corps suddenly shifted gears, after having completed all, or nearly all, of the aspects of its individual permit review, was because it had become clear that the County's project could not qualify for individual permits. They point to their counsel's January 25, 2002 letter, in which he emphasized that, if the County truly had abandoned its plans to build the TC Interceptor, "then the permit must be denied because the location of the [WWTP] and the influent pump station do not satisfy the Section 404(b)(1) guidelines." A.R., at 1614. The

replacement of the TC Interceptor with the Lee Davis Alternative, counsel argued, meant that the WWTP and IPS would no longer need to receive sewage by force of gravity from the Totopotomoy Creek watershed, but, instead, "could receive pumped sewage from other areas[,]" and, as such, "could be located on uplands [as opposed to wetlands] virtually anywhere in the area." *Id.* It is the Plaintiffs' position that the Corps' unexpected shift to the use of NWPs reflects the Corps' recognition that, in fact, a decision granting individual permits would be indefensible.

Counsel for the Corps has characterized the Corps' actions in the following terms:

> As an initial matter, the Corps exercised its discretionary authority to revoke the authority of the applicable NWPs for the [TC Interceptor] when the County still intended to construct [it]. Then, when the Corps required the County to combine the [TC Interceptor] with the [WWTP], forcemain and outfall into a single project for permitting purposes after this Court's August 14 [, 2001] ruling, the Corps also required the County to do this in the context of an application for an individual permit. This action ***642** effectively extended the Corps' assertion of discretionary authority from the [TC Interceptor] alone to the entire project. Subsequently, when the County submitted an application for the revised project (dropping the [TC Interceptor] and adding the Lee Davis [Alternative]), the Corps continued to require the County to comply with the requirements applicable to... individual permits. As a result, when the Corps invoked 33 C.F.R. § 330.4(e)(3) ... it was restoring the applicability of the NWPs and revoking the assertion of its discretionary authority[.]

June 17, 2002, Defendant Army Corps of Engineers' Merits Brief and Brief in Response to Plaintiffs' Pre-Hearing Memorandum, at 21-22 ("Corps' Br. at ____"). [FN56]

FN56. Although it has not entirely ignored 33 C.F.R. § 330.4(e)(3), the County has focused most of its attention respecting the Corps' shift from the individual permit mode to the NWP mode on a different regulation (33 C.F.R. § 330.1(f)). *See infra.*

In the April 4 MFR, however, the Corps did not espouse its approach to reviewing the County's JPA with the same clarity as is stated above. There, as noted, the Corps merely stated that the results of its review evinced that the County's project had minimal environmental impacts and that, as a result, the Corps was invoking 33 C.F.R. § 330.4(e)(3) to "restore authorization" under the applicable NWPs.

(2) Analysis Of The Corps' Decision To Shift Processes

The Corps' reliance on § 330.4(e)(3) is misplaced. The clear terms of the discretionary authority regulations indicate that discretionary authority is a "right (*i.e.,* discretion) to modify, suspend or revoke NWP authorizations." That language reflects that the right that has been reserved presupposes, and requires, an extant authorization. Indeed, the very regulation under which the Corps' purports to have acted in this case speaks in terms of "restoring" an authorization under the NWPs. Given its usual construction, the word "restore" means "to give back (as something ... taken away); to put or bring back (as into existence or use); and to bring back to or put back into a former or original state." *Webster's Third New International Dictionary,* at 1936 (1986). Thus, the exercise of discretionary authority to "restore" an authorization under an NWP requires that the County had some NWP authorization that could be restored.

The record demonstrates that, in this case, there was no extant authorization that could be restored. As discussed in *Crutchfield* I, there are two kinds of NWP authorizations. The first kind of NWP authorization is available for use merely by qualifying pursuant to the terms of the published NWP. The second kind, however, is available for use only if, after having received a request from an applicant, the Corps issues a verification for use of an NWP. *Crutchfield* I, 154 F.Supp.2d at 894. As the Corps acknowledges in its brief, the NWPs at issue in this case are ones that require Corps verification (*i.e.*, confirmation that the activities sought to be undertaken comply with the terms and conditions of the NWPs sought to be used). *See* Corps. Br. at 7.

The NWPs that were invalidated in *Crutchfield* I could not have been "restored," here, because they related to a different project. The Corps acknowledges that obvious truth and concedes that it did not even purport to do that. *See* Corps Br. at 23. And, after *Crutchfield* I, there simply was no other NWP authorization that could have been "restored" by the April 4 MFR. The Corps tries to avoid this ***643** rather obvious result by positing that it "simply restored the potential applicability of the relevant NWPs to the project." Corps Br. at 23. That assertion, however, is at odds with the NWP permitting scheme and with the Corps' own admission that, before the County could proceed with the project under review in this case, it needed to request verifications of NWPs, which must be approved (affirmatively) by the Corps. The County having made no such request, and the Corps having given no such verifications, there was nothing to "restore." Therefore, the Corps' citation to § 330.4(e)(3) is of no force and effect.

c. The Authority Cited By Counsel For Shifting Procedures

That, however, does not end the inquiry because, during the briefing on the merits of the Plaintiffs' case, the lawyers for the County and the Corps proffered another regulation (which the Corps, itself, did not cite in its April 4 MFR)--33 C.F.R. § 330.1(f)--as authority that allowed the Corps to do what it did here. That regulation provides:

> *Individual Applications.* DEs should review all incoming applications for individual permits for possible eligibility under regional general permits or NWPs. If the activity complies with the terms and conditions of one or more NWP, he should verify the authorization and so notify the applicant. If the DE determines that the activity could comply after reasonable project modifications and/or activity-specific conditions, he should notify the applicant of such modifications and conditions. If such modifications and conditions are accepted by the applicant, verbally or in writing, the DE will verify the authorization with the modifications and conditions in accordance with 33 CFR § 330.6(a). However, the DE will proceed with processing the application as an individual permit and take the appropriate action within 15 calendar days of receipt, in accordance with 33 CFR 325.2(a)(2), unless the applicant indicates that he will accept the modifications or conditions.

The short answer to the question whether the defendants may take refuge in 33 C.F.R. § 330.1(f) is that, as noted, the Corps did not cite to, discuss, or otherwise rely upon, that regulation in the April 4 MFR. That undisputed fact, alone, constitutes sufficient grounds to ignore the argument based upon § 330.1(f). *See e.g., Crutchfield,* 154 F.Supp.2d at 900 (holding that an argument that the Corps did not advance in the first instance was "a classic post-hoc rationalization of counsel which provides no ground for supporting the agency's decision."); *see also S.E.C. v. Chenery Corp.,* 332

U.S. 194, 196, 67 S.Ct. 1575, 1577, 91 L.Ed. 1995 (1947) (emphasizing the "simple but fundamental rule of agency law" that "a reviewing court, in dealing with a determination or judgment which an administrative agency ... is authorized to make, must judge the propriety of such action solely by the grounds invoked by the agency.").

Even if the law did permit consideration of a regulation upon which the Corps clearly did not rely, however, and even if it was determined that the Corps had acted in conformance with that regulation, the belated invocation of 33 C.F.R. § 330.1(f) would not justify the course that the Corps followed in this case (*i.e.,* informing the Plaintiffs, the Court, and the public that it was proceeding under the individual permit regime while, at the same time, deciding behind closed doors to take another route). In the context of this case, and remembering the decision in *Crutchfield* I (which emphasized that "the regulated party and the regulator are not the only interested parties in respect of" ***644** its decisions as to the County's project), the Corps owed a duty of full disclosure to all interested parties. *Crutchfield,* 154 F.Supp.2d at 900. Here, that was true whether or not the Corps' regulations expressly require it to inform the public that it is considering whether, or that it had decided that, it would switch from the individual permit mode to the NWP mode. [FN57]

> FN57. Without reaching a definite conclusion on that issue, an initial review of the Corps' regulatory scheme appears to support the position that no precise regulation mandates that the Corps must notify interested parties of a decision to switch from the individual permitting mode to the NWP mode. And, of course, notice and comment ordinarily is

> unnecessary where the Corps determines that a project may proceed under the authority of NWPs. *See supra,* note 18. The facts of this case (including the events and decisions in *Crutchfield* I, and the discrepancy between the Corps' internal workings and the information with which it was providing the public), however, are far from ordinary. *See infra.*

That is because, even absent any express regulatory mandate that the Corps violated when it failed to afford notice of its decision to shift to the NWP mode, a more fundamental principle is at work here. In the context of agency rule-making, that principle is known as the "logical outgrowth" rule, which recognizes that, "if the final rule deviates too sharply from the [proposed rule as to which the public was apprised], affected parties will be deprived of notice and an opportunity to respond to the proposal." *Small Refiner Lead Phase-Down Task Force v. U.S.E.P.A.,* 705 F.2d 506, 547 (D.C.Cir.1983) (referred to as "*Small Refiner* "). As noted in the *Small Refiner* decision, "[c]ourts have devised various verbal formulas for the extent to which an agency can make changes in the final rule that were not clearly presaged by the notice of proposed rulemaking[,]" all of which seek to answer "the underlying question of how much notice is enough." *Id.* In *Small Refiner,* the United States Court of Appeals for the District of Columbia Circuit discussed that question in the following terms:

> In any particular case, the answer to that question must turn on how well the notice that the agency gave serves the policies underlying the notice requirement. Notice, as we see it, serves three distinct purposes. First, notice improves the quality of agency rulemaking by ensuring that agency regulations will be "tested by exposure to diverse public comment." (citation omitted). Second, notice and

> the opportunity to be heard are an essential component of "fairness to affected parties." (citations omitted). Third, by giving affected parties an opportunity to develop evidence in the record to support their objections to a rule, notice enhances the quality of judicial review. *See Marathon Oil Co. v. EPA,* 564 F.2d 1253, 1271, n. 54 (9th Cir.1977) ("Such comment is often an invaluable source of information to a reviewing court attempting to evaluate complex statistical and technological decisions.").... Against these values, we must balance the public interest in expedition and finality.
> *Id.*

The Corps' conduct in this case, whether or not technically permissible under 33 C.F.R. § 330.1(f), undermined the very purposes that its public notice was intended to serve. [FN58] First, it was unfair (and, in ***645** the context of the background of *Crutchfield* I, unthinkable) to tell the Plaintiffs and the interested public one thing (*i.e.,* that the Corps was considering the County's application through the individual permitting process), while, at the same time, internally contemplating (quite seriously) a very different result (*i.e.,* that the project likely could proceed under the NWP program) that would carry significant consequences. In addition, the decision to proceed in that manner effectively precluded, or at least avoided, public comment on certain issues respecting the switch from the individual permit mode to the NWP mode (as well as the Corps' ultimate decision to verify NWPs). The fact that the Corps' decisions respecting NWP verifications are not subject to public notice and comment does not alter that conclusion. Although neither the Court nor the defendants ought to speculate as to the issues and concerns that the Plaintiffs (and others) might have raised, and that the Corps properly would have had reason to consider (if the Corps had been forthright

respecting its intentions all along), it is highly likely that, at least, the Plaintiffs would have addressed the propriety of issuing NWPs, given the central focus of that issue in *Crutchfield* I. Thus, even if the invocation of 33 C.F.R. § 330.1(f) were not a classic post-hoc rationalization to justify agency action, that provision would not support the Corps' decision- making process in this case.

> FN58. It is of little consequence that, although the aforementioned principles of administrative law usually are invoked in the context of rule-making, the agency action at issue in this case is more akin to an adjudication. Where, as here, an agency's regulations include notice and comment provisions, those provisions must be presumed to serve the purposes cited above. There is no reason to believe that the Corps' notice and comment regulations are intended to do otherwise.

3. The Corps' Decision That The Project Had "Independent Utility"

The final issue is whether the Corps' decision to allow the County to proceed with its project under the authority of four NWPs was a valid one. For the reasons set forth below, that decision is arbitrary, capricious, and not otherwise in accordance with law.

The analysis here begins with the precept that a project may proceed under an NWP only if the record demonstrates, and the Corps finds, that the project will have no more than minimal adverse environmental (*i.e.,* wetlands) impacts. *See* 33 C.F.R. § 330.1(b). Where, as here, the project requires

multiple NWPs, the cumulative impact on wetlands may not exceed the maximum impact (*i.e.,* number of acres of wetlands affected) allowable under the NWP being used that has the highest allowable limit. *See* 67 Fed.Reg.2020, 2063 (January 15, 2002).

The extent of adverse impacts, of course, depends, in the first instance, on how the project under evaluation is defined. Thus, there is an inextricable linkage between the disclosure of all "reasonably related" activities (*i.e.,* the requirement of section 325.1(d)(2)), and the decision to allow a project to proceed under NWPs. In other words, if all reasonably related activities are not disclosed, the assessment of the project's adverse environmental impacts cannot accurately be determined.

The defendants, however, assert that the Corps' "reasonably related" finding had no continuing import at all because, in their view, the issue simply is whether the project, as described by the County in its November 16 JPA, qualifies for verification under the NWPs that the Corps ultimately approved. If it does, they argue, the Corps' decision must be upheld. *See supra,* at 622 - 623.

Even if that were true, however, a review of whether the project qualifies for the NWPs under which the Corps allowed the County to proceed certainly requires an evaluation of whether the County's JPA satisfied the regulations that, undisputably, ****646 are*** applicable to NWPs. Those regulations include a separate test for measuring and defining the scope of the activities under review. The Plaintiffs' argue that the Corps' decision with respect to those regulations also is deficient; and an examination of those regulations, and of the record, reveals that the Plaintiffs are correct.

a. The Applicable Regulations

During the pre-hearing briefing, the parties devoted unnecessary attention to 33 C.F.R. § 330.6(d), which, everyone later recognized, applies only in the situation where "portions of a larger project ... proceed under the authority of ... NWPs while the [Corps] evaluates an individual permit application for other portions of the same project[.]" That was the factual scenario under review in *Crutchfield* I. *Crutchfield,* 154 F.Supp.2d at 895-900. Here, in contrast, the issue is whether the County may proceed under the authority of multiple NWPs. By the time of oral argument, the parties agreed that the Corps did not act pursuant to § 330.6(d). Rather, it relied on 33 C.F.R. § 330.6(c) which provides:

> Multiple use of nationwide permits. Two or more different NWPs can be combined to authorize a "single and complete project" as defined at 33 C.F.R. § 330.2(i). However, the same NWP cannot be used more than once for a single and complete project.

33 C.F.R. § 330.2(i), to which § 330.6(c) refers, explains in relevant part that a "single and complete project" is:

> the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For example, if construction of a residential development affects several different areas of a headwater or isolated water, or several different headwaters or isolated waters, the cumulative total of all filled areas should be the basis for deciding whether or not the project will be covered by an NWP.

Additional guidance is set forth at 67 Fed.Reg.2020, 2094 (Jan. 15, 2002), wherein the term "independent utility" is defined as:

> [a] test to determine what constitutes a single and complete project in the Corps regulatory program. A project is

considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

b. The Corps' Decision

The Corps found that the activities described in the County's November 16 JPA constituted a "single and complete project", and it articulated that finding at three places in its April 4 MFR. A.R., at 6; 23; 38. And, each time that finding is articulated, it accompanies another finding--that is, that the County had included in its JPA all "reasonably related" activities. *Id.* Indeed, those two findings are connected in a very real sense because the Corps relied upon, and recited, the exact same points in support of both of them. It made no distinction between the "reasonably related" test contained in § 325.1(d)(2) and the "single and complete project" test set forth at § 330.6(c). Instead, based on the factors discussed above, *see supra,* Section C.1.B., the Corps concluded that the County "has fully disclosed all of the activities that are reasonably related to the project, and that the ***647** application before the Corps is for a single and complete project with independent utility from the previously proposed [TC Interceptor] as well as from any future improvements to the conveyance of wastewater within the County." A.R., at 6.

Later, at page 23 of the MFR (in the section entitled "Other Options to Handle Sewage in the Future"), the Corps explained those conclusions in slightly more detail. It

stated:

> The District Engineer has determined that [the] County has fully disclosed all of the activities that are reasonably related to the project presently before the Corps. Based on [the] County's plans to abandon the influent pump station, to eliminate the section of the sewer line shown in the Comprehensive Plan outside of the [SSA] along Totopotomoy Creek, and to voluntarily vacate the easements the County has obtained between Rural Point Road and the [WWTP], if requested, the County has demonstrated to the satisfaction of the [Corps] that [it has] no plans to construct the [TC Interceptor] in the reasonably foreseeable future. Furthermore, the County has identified a number of feasible alternatives for handling sewage within the County in lieu of constructing the [TC Interceptor]. Future pump station construction, treatment plant and pump station upgrades and the currently proposed construction of a sewer line by others along a portion of the originally proposed [TC Interceptor] alignment would be considered as cumulative impacts of the project that would occur within 7 to 10 years. However, the project that is currently before the Corps has been determined to have independent utility from these other projects and is therefore treated as a single and complete project. The County has clearly demonstrated through its actions that the [TC Interceptor] is neither a necessary adjunct to the [WWTP], nor is it any longer the County's preferred alternative.

Still later, at page 38 of the MFR (in the section entitled "Findings and Decision of the District Engineer"), the Corps states that it "has fully evaluated [the] County's application and has determined that it represents a single and complete project and that the applicant has disclosed all reasonably related activities."

It is worth emphasizing the role of the "independent utility" test, as that test relates to the "single and complete project" requirement of 33 C.F.R. § 330.6(c). In the context of § 330.6(c) and § 330.2(i)-- where the issue is whether a project proponent may proceed pursuant to the authority of multiple NWPs--the role of the "independent utility" test is closely akin to the role of the "reasonably related" requirement (provided at 33 C.F.R. § 325.1(d)(2)) under the individual permit regulatory scheme. [FN59] Both tests ***648** serve to define the project under review, which involves properly identifying, and accounting for, all the constituent elements thereof so that the adverse effect on wetlands can be quantified. In the context of individual permits, the regulations accomplish that by requiring an applicant to include within its application "all activities which the applicant plans to undertake which are reasonably related to the same project and for which a [Corps] permit would be required[.]" 33 C.F.R. § 325.1(d)(2). *See supra.* With respect to NWPs, the regulations require essentially the same thing, only they employ a slightly different verbal formulation.

FN59. This should not be confused with the "independent utility" test provided at 33 C.F.R. § 330.6(d), which, as noted, directly was at issue in *Crutchfield* I. *See Crutchfield,* 154 F.Supp.2d at 895-903. In that case, the issue was whether the WWTP, force main, and outfall had utility that was "independent" of the TC Interceptor, such that the Corps properly could authorize construction on those components while, at the same time, it evaluated the TC Interceptor under the individual permit regulatory scheme. In contrast, the issue here is whether, taken together, all of the activities that the Corps decided

would cause only "minimal impacts" constitute a "single and complete project"--which is to ask, would the County undertake, or "construct," those activities "absent the construction of other projects in the project area?" Thus, the concept of "independent utility" serves at least two related, but distinct, purposes in the Corps' regulations. Those concepts are related in that both are intended to identify, and to thwart, instances where project proponents improperly attempt to "segment" their projects to evade fulsome regulatory inspection. *See id.*, at 900, n. 12 (noting that "[s]egmentation and the scope of a project are threads that run throughout NEPA, CWA, and NHPA regulations."). They are distinct, however, with respect to the precise type of segmenting that they aim to prevent. Section 330.6(d) is directed at the type of segmenting that occurs when a project proponent severs a portion of its project that would engender substantial (*i.e.*, more than "minimal") environmental impact (and, therefore, would require an individual permit), and without which the rest of the project simply cannot function as needed or intended. In that type of situation, all of the activities under review are clear and identified; the reviewing agency, or Court, simply must ask "does this, or these, portion(s) of the project (for which the proponent seeks NWP approval) have utility, or value, apart from the value that they have when connected to this other portion of the project (which is under consideration for an individual permit)"? In *Crutchfield* I, the answer to that question, unequivocally, was "no." *See id.*, at 903. What the Corps seeks to prevent through section 330.6(c), on the other hand, is the type of segmenting that occurs when a project proponent fails to include,

> as part of its request for NWP verifications, the environmental (*i.e.,* wetlands) impact of "other projects in the project area." That type of segmenting may be more difficult to identify because, almost by nature, the proponent will not have included the segmented activities or components in its project description (or request for NWP verifications). That, of course, is the Plaintiffs' charge in this case.
> Thus, it should be clear that both of the foregoing concepts of "independent utility" bear a clear relationship with the other regulatory test aimed at preventing improper segmenting--that is, the "reasonably related" requirement of section 325.1(d)(2). *See Crutchfield,* 154 F.Supp.2d at 895, n. 8 (explaining that, if 33 C.F.R. § 325.1(d)(2) had been applicable in the NWP-context, "the Corps' handling of this matter would have violated the reasonably related requirement for the same reasons that the Corps violated the independent utility requirement of section 330.6(d).").

Specifically, before the Corps may verify that a proponent may undertake certain activities under the authority of multiple NWPs, it must confirm that the activities involved constitute a "single and complete project," which means that those activities are "the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers." 33 C.F.R. §§ 330.6(c); 330.2(i). And, as noted, the applicable test for undertaking that inquiry is whether the project "would be constructed absent construction of other projects in the project area." 67 Fed.Reg. at 2094 (stating that "[p]ortions of a multi-phase project that depend upon other phases of the project do not

have independent utility[,]" but that, "[p]hases of a project that would be constructed even if other phases were not built" do have "independent utility.").

Thus, the object of the exercise, under either § 325.1(d)(2) or §§ 330.2(i) and 330.6(c), is to assure that the Corps has before it complete information about the full dimension and reach of a project so that it can make an informed decision that the project--*in toto*--will have no more than minimal impact.

***649** To apply §§ 330.2(i) and 330.6(c), and to assess the project's eligibility for NWPs (including the essential finding that the project will cause only "minimal impacts"), the Corps was obligated to study the record critically and to assess in a fair and reasoned manner what that record did, and did not, reveal. That was especially true here because of the Corps' flawed permitting process, and the decision respecting that process, in *Crutchfield* I.

The Corps was required to assess the County's project in perspective of its substantial cost (more than $30 million) [FN60] and its stated purpose. That assessment should have included contemplating, in a practical sense, whether the County would expend funds of that magnitude where the result likely would not achieve the County's stated objective. [FN61] Along those lines, when the County served up an alternative that would allow it to meet its objective for perhaps only two to six years (absent the construction of additional sewage collection and conveyance lines), the Corps was obligated to examine the record and to obtain defensible answers respecting where, and when, those additional lines might be built.

FN60. *See Crutchfield,* 192 F.Supp.2d at 449-50. That estimate of cost is based on the facts adduced at the October 3, 2001 hearing respecting the Plaintiffs' motion for injunctive relief in *Crutchfield* I. Clearly, the precise costs of the project have changed since then. It is beyond serious question, however, that the County's planned wastewater treatment improvements project will require the expenditure of many millions of dollars in County funds. Indeed, the WWTP portion of that project, alone, was estimated to cost between $18 and 19 million.

FN61. Indeed, the record reflects that the Corps is quite cognizant of the need to evaluate projects pragmatically, and in light of their proponents' proffered goals. In particular, the record contains a November 26, 2001 internal Corps e-mail (which is addressed to Ms. Painter, and to others) in which one of its high-ranking officials considers "whether pumping it to another county should be considered[.]" A.R., at 2834. Although it is not entirely clear, it is not unreasonably speculative to presume that the "it" referred to above is wastewater, and that the topic of concern in that e-mail is the degree to which the environmental laws and regulations that the County's JPA, and the Plaintiffs' objections thereto, implicated, required the Corps to consider alternatives to the project as a whole. The remainder of the November 26 e-mail bears out that presumption.
It was concerning that issue, then, that the Corps' representative proffered "[o]ne of [his] all-time favorite quotes from Regulatory case law [,]" which was as follows:
Under these [404(b)(1)] Guidelines, therefore, not

> only is it permissible for the Corps to consider the applicant's objective; the Corps has a duty to take into account the objectives of the applicant's project. Indeed, it would be bizarre if the Corps were to ignore the purpose for which the applicant seeks a permit and to substitute a purpose it deems more suitable.
> *Louisiana Wildlife Federation v. York,* 761 F.2d 1044, 1048 (5th Cir.1985).
> After quoting that passage, the representative explained that "[i]f the County's purpose is to address its sewage needs within its boundaries ... then pumping it outside the County would not be a practicable alternative because it wouldn't address the applicant's overall purpose." A.R., at 2834.

The Corps was not permitted to confine that inquiry to an unthinking acceptance of the County's responses, especially where, as here, it had every reason to appreciate that the supply of wastewater to the Lee Davis Alternative (and, through it, to the WWTP) would not permit the County to achieve its objectives for more than a very short period of time (in the face of the County's own growth projections). A critical look at the record discloses those serious issues, however, the Corps undertook no thoughtful assessment thereof. The findings in Section II.C.1.b(3) are relevant on that point and, thus, they are incorporated here.

***650** At the same time, the record reveals that other sources of sewage are being planned and that, since *Crutchfield* I, one of those activities has been accelerated by 10 years. That activity, now apparently slated for 2007, is a pump station that will be of no use unless it connects to a sewage conduit. The County's own planning map indicates that one

of the nearest conduits presently defined in the County's plans is the LC Sewer, which traverses quite near to a water of the United States, thereby portending substantial wetlands impacts. The Corps was obligated to know those things, all of which are in the record, and to critically assess their significance. It did not. [FN62] Instead, it once again accepted the County's representations without pressing for answers to the obvious questions that an expert agency should have asked.

> FN62. For example, after recognizing that the Powhite Creek Forcemain and Pump Station may "come on line around 2007," the Corps explained that "[t]he exact location of [those components] have not been identified, therefore, the extent to which the project would be within the Corps' jurisdiction cannot be determined at this time." A.R., at 23. Similarly, the Corps noted that "[s]ome of the future activities in the vicinity of this project are likely to result in wetland impacts, although the specific acreages of impact cannot presently be defined." A.R., at 24 (anticipating that "avoidance, minimization, and mitigation" would render cumulative impacts of such activities "minimal"). Further still, in the "Findings and Decision" section of the April 4 MFR, the Corps notes that "[f]uture treatment and conveyance projects that will be developed by the County when the need arises must be reviewed for compliance with applicable State and federal laws and approved or denied as appropriate." A.R., at 38.

In like fashion, the Corps fully was aware that the County and The Hanover Group had struck an agreement pursuant to

which, if the County did not build the TC Interceptor, The Hanover Group would build a sewer in the alignment of that interceptor and for the purpose of serving of its "Bell Creek" development. The Corps also knew that, after the decision in *Crutchfield* I, and after the County filed its November 16 JPA, The Hanover Group filed its own application for an individual permit for the "Bell Creek" sewer. A.R. 1659-61. The Corps knew that the "Bell Creek" sewer would be in the right-of- way owned by the County; that the County was paying for part of the construction cost thereof through an oversize credit; and that, when built, the sewer would be a public sewer owned by the County.

Notwithstanding those compelling indicia that the County and The Hanover Group might very well be an "association of owners/developers" (within the meaning of § 330.2(i)), the Corps neither discussed, nor made any finding respecting, the likelihood (or even the possibility) that the impacts of the "Bell Creek" sewer should have been included in the County's application. That assessment is of great significance here because, as noted above, The Hanover Group was not even going to build the "Bell Creek" sewer if, as the County had planned, the TC Interceptor was built. That fact, considered in perspective of the facts that the "Bell Creek" sewer would be built on County property, through partial funding by the County, and that the County ultimately would own it, cries out for serious assessment. That is especially true because the Corps knew that, if the "Bell Creek" sewer had been included in the County's November 16 JPA, there could have been no finding that the County's project had only "minimal impacts." [FN63] Instead of facing that issue, ***651** however, the Corps made the conclusory finding that "the proposed work by others along a portion of the original [TC Interceptor] alignment is not reasonably related to Hanover County's Project and will be

evaluated by the Corps as part of [T]he Hanover Group's application for multi- use development." A.R., at 38.

> FN63. The January 15, 2002 public notice that the Corps issued with respect to The Hanover Group's sewer project reflects that construction of that project will engender substantial wetlands impact. A.R., at 1644- 46. It is undisputed that, if those impacts were added to those described in the County's November 16 JPA, they would render the County's project unfit for the use of NWPs.

The April 4 MFR makes clear that the Corps based its decision that the County had submitted an application for a "single and complete project" on the same conclusions upon which it based its "reasonably related" finding. But, as explained above, those conclusions provide no support for that finding. And, for the same reasons, the "single and complete project" finding equally lacks in record support. How, for example, can the four components of the project contained in the November 16 JPA be considered the County's "total project" in perspective of the fact that, in that form, with no other improvements, the County would exceed its limit under its contact with Henrico by 2004? How can a project have "utility" that genuinely is "independent" of "other projects in the project area," such as the "Bell Creek" sewer, the Powhite Creek Pump Station, and the LC Sewer, when the evidence reflects that those projects are either presently being, or planned to be built, for the very same purpose as the project under review (that is, for the purpose of off-loading sewage from Henrico to the WWTP)? The Corps' decisional document simply does not address, much less satisfactorily answer, those questions for the same

reasons that its "reasonably related" finding is deficient. That document reads as if the Corps officials simply met with the County's representatives, asked some questions, wrote down what they heard, and copied the County's answers into the April 4 MFR.

The County emphasizes that the project for which it sought authorization does have "independent utility" because it "serves two distinct needs of the County--additional treatment capacity and a conveyance system for bringing untreated wastewater to the plant." June 17, 2002, The County of Hanover's Pre-Hearing Memorandum and Response to Plaintiffs' Pre-Hearing Memorandum, at 19, 23; *see also* A.R., at 429.

The record supports the County's assertion that construction of its wastewater treatment project (as that project is described in its application) would serve two of its needs. In its pre-hearing brief, the County cited to page 451 of the administrative record, and at that hearing it also noted page 460 of the record, as evidence of that fact. Both of those citations are to the County's Wastewater Alternatives Study, which previously has been discussed, and which the County submitted to the Corps in support of its November 16 JPA. [FN64] Page 460 of the record states:

> FN64. It is worth noting that those two citations are the only ones to which the County has pointed in support of its "twin aims" argument. Both citations are to the same County-generated and County-proffered document.

> The project will allow [the] County to divert approximately 700,000 gpd of wastewater from Henrico to the [WWTP]

> for initial start-up. This amount of flow will allow the County to provide necessary wastewater services for the health, safety, and welfare of its citizens, support its "smart growth" policy, economically operate the new plant, and insure that it remains in compliance with its contract with Henrico County. The proposed Lee Davis [Alternative] ***652** ... is an environmentally sensitive, economically affordable first conveyance project to the [WWTP]. There will be future conveyance projects that will also connect to the [WWTP] that will be developed as needed and will be required to stand on their own merits.

The April 4 MFR, however, does not reflect that the Corps relied upon the foregoing rationale in making its determination that the activities for which the County had sought approval constituted a "single and complete project" that "would be constructed absent construction of other projects in the project area." To the contrary, the "twin aims" rationale that is set forth in the County's brief, and that is supported by the County's Wastewater Alternatives Study, simply does not appear in the Corps' decisional document at all.

Instead, and as noted earlier, when the Corps articulated its decision that the County's application describes "a single and complete project," it appears to have relied on the very same factors upon which it relied to support its determination that the County's JPA included all "reasonably related" activities. A.R., at 5-6; 23; 38. However, as stated above, the manner in which the Corps examined, and arrived at the conclusions underlying, those factors provides no more support for the "reasonably related" finding than for the finding of "independent utility."

Even if the Corps did rely on the justification that the

County has proffered--that the project, as applied for, is a "single and complete" project with "utility" independent from other projects in the project area because (1) it provides an initial means through which to convey sewage to the WWTP; and (2) it will provide allow the County economically to begin operating the WWTP, the Corps' decision would be no more defensible. That is because, in view of the County's own representations (as well as the Plaintiffs' showings), those two ends do not realistically reflect, or take into account, the purposes for which the County is undertaking its project.

In sum, the Corps' finding that the November 16 JPA described a "single and complete project" is defective. The Corps merely recited the same considerations that animated its deficient finding as to the "reasonably related" requirement of 33 C.F.R. § 325.1(d)(2) and, along side of its declaration that the County's application was "complete," declared that its application also described "a single and complete project" within the meaning of 33 §§ 330.6(c) and 330.2(i). One will search in vain for any reference to issues such as "would the project, as proposed, be constructed absent construction of other projects in the project area," such as the ones discussed above? Similarly, there is no discussion in the April 4 MFR of whether the County's JPA describes plans to construct only "portions" of a project that, in reality, "depend on other phases" to achieve actual utility. Finally, the Corps appears to have turned a blind eye to what is, in the final analysis, a central question that the Plaintiffs' case raises--that is, how could any reasonably prudent public official justify the expenditure of tens of millions of dollars to plan, build, maintain, and litigate over, a wastewater treatment improvements project that, as described (and absent additional improvements) might serve its needs for perhaps two to three years, and, at most, six years. The

Corps should have broached those topics. Its failure to do so, as well as the patently conclusory manner in which it arrived at its final determination, render the Corps' decision as to 33 C.F.R. § 330.6(c) arbitrary and capricious. And, for the reasons set forth above, that renders invalid its subsequent determination that the impacts of the County's project are only "minimal."

***653 CONCLUSION**

The decision on the merits in *Crutchfield* I reflected that, in that case, the Corps' permitting decision was full of unexplained, and inexplicable, holes. After having struggled for some time with the Corps' analysis of the issues presented there, and after attempting to trace a reasoned path through that analysis, it was evident that the permitting decision could not stand. That judgment was inescapable, and, in large part, it was based on the following precepts:

> It is axiomatic that the Corps is obligated to provide reasoning to support its determination[s].... That is especially important where, as here, the determination is, on its face, of doubtful rationality. Of course, the Court is obligated to uphold " 'a decision of less than ideal clarity if the agency's path may reasonably be discerned,' " *State Farm Mut. Auto. Ins. Co.,* 463 U.S. at 43, 103 S.Ct. 2856, 77 L.Ed.2d 443, but that precept does not apply here because the Corps' decisional path is not discernable.... The articulation of the Corps' reasoning is of utmost importance particularly in the process followed by the Corps which encourages private resolution of the details respecting matters of public importance.... [T]he regulated party and the regulator are not the only interested parties in respect of these decisions. Thus, if what is said behind closed doors is convincing to the regulator, it is obliged to set forth clearly and cogently its reasoning when it makes its decision

> public. Nowhere is that more important than where, as here, the logic of the decision is so difficult to discern and where the decision is such a drastic departure from long-standing plans and from reality. Under these circumstances, the agency must articulate why it has made its decision with sufficient clarity that others affected by the decision and the Courts can understand it. The Corps has not done that and its determination ... cannot stand[.]

Crutchfield, 154 F.Supp.2d at 899-900. The matter was remanded, and the Corps was afforded the opportunity to reconsider the County's plans and to ameliorate the analytical problems and deficiencies that so badly had undermined its decision. It was understood, and fully expected, that the Corps would take a hard look at the matter and make a fresh start. *See Crutchfield,* 175 F.Supp.2d at 846 (presuming that Corps will "endeavor to abide by the law[ ]" and "attempt to keep the previous flawed decision from affecting the calculus of the permitting decision on remand.").

It is uniquely disquieting, therefore, to be confronted with the present decisional document, which reflects that the Corps, again, essentially abdicated its statutory and regulatory obligations. The defendants, no doubt, will emphasize the voluminous administrative record that the parties proffered, as well as the forty-seven page document in which the Corps articulated the reasoning underlying its decision. And, there is no question that the Corps considered many topics in reaching, and used many words to justify, its decisions. However, after studying that decisional document in perspective of the facts of record, including the events and judgments in *Crutchfield* I, and having considered the parties' arguments, what stands out are those topics that the Corps failed to consider. The absence of thoughtful explication respecting those topics thoroughly has frustrated the Court's concerted effort to "reasonably

discern the agency's path."

As an initial matter, of course, the Corps failed realistically to examine how much wastewater the Lee Davis Alternative will ***654** off-load from Henrico to the WWTP. The conclusion that the amount off-loaded would be "comparable" to the amount that the TC Interceptor would have off-loaded, which is interspersed throughout the April 4 MFR, is correct as far as it goes. However, that is not an answer to the questions that, logically, should have prompted activation and application of the Corps' expertise (after reviewing the Plaintiffs' concerns). As the Plaintiffs properly have recognized, the capacity of the Lee Davis Alternative is not particularly relevant. What is important, and what the Corps was obligated to consider, is the amount of flow that will be necessary to assuage the County's avowed sewage treatment crisis and from where, and through what means, that sewage would be conveyed. Moreover, the Corps breezed over compelling evidence that suggests that several activities within the SSA--The Hanover Groups's "Bell Creek" sewer, the Powhite Creek Pump Station, and the LC Sewer--should have been included in the County's November 16 JPA. As discussed, that is true under both relevant tests for defining the scope of a given project (*i.e.*, the "reasonably related" test set forth at 33 C.F.R. § 325.1(d)(2) and the "single and complete project" test provided for in 33 C.F.R. § 330.6(c)).

What the record reflects is that, almost from the start, the Corps seriously was considering authorizing the County to proceed pursuant to NWPs. As discussed, that was contrary to the representations that the Corps made to this Court and to the public. Thereafter, the Corps set off to reason to its intended result. It met with the County's representatives and asked questions, however, it blindly accepted the County's

responses and did not independently assess whether those responses, or the conclusions to which they led, made logical and practical sense. The Corps recited the County's responses, almost verbatim, into its intermediate MFRs and, ultimately, into its final decisional document. That manner of decision-making, by a federal regulatory agency, is woefully inadequate.

Finally, it is worth reiterating that the events of *Crutchfield* I, as well as the nature and outcome of the Corps' review of the County's November 16 JPA, have forced the Court to conduct its judicial review in a rather unique context. If ever a case required the Court to employ a standard of review that is less deferential than that which ordinarily is employed, this is that case. That said, however, it must be emphasized that, even absent *Crutchfield* I, and even under a so-called "ordinary" standard of review, this case would be decided exactly the same way. Such is the extent of the Corps' shortcomings in this case.

Accordingly, the Corps' findings as to 33 C.F.R. §§ 325.1(d)(2) and 330.6(c), as set forth in the April 4 MFR, are set aside as arbitrary, capricious, and not in accordance with law. For that reason, the Corps' verification that the County may proceed with the construction of its wastewater treatment project pursuant to the authority of NWPs 7, 12, 18 and 39 is arbitrary, capricious, and not otherwise in accordance with law, and that decision is VACATED. The matter, again, will be remanded to the Corps for review and for a decision not inconsistent with this Memorandum Opinion. Unfortunately, however, the unique facts of this case require the issuance of more specific instructions on remand, which are set forth in the accompanying Order.

The Clerk is directed to send a copy of this Memorandum

Opinion to all counsel of record.

It is so ORDERED.

***655 ORDER**

For the reasons set forth in the accompanying Memorandum Opinion it is hereby ORDERED that: (1) the decision of the United States Army Corps of Engineers (the "Corps"), as reflected in its Memorandum For the Record dated April 4, 2002, verifying that the County of Hanover, Virginia (the "County") may use Nationwide Permits No. 7, 12, 18, and 39, is VACATED and set aside as arbitrary, capricious, and not otherwise in accordance with law; and (2) that the matter is remanded to the Corps for further proceedings not inconsistent with the Memorandum Opinion and the ensuing provisions of this Order.

For reasons adequately set forth in the accompanying Memorandum Opinion, it is further ORDERED that:

(1) the Corps shall consider the Joint Permit Application filed by the County on November 16, 2001 as an application for an individual permit;

(2) the Corps shall issue a new Notice of proceedings under 33 C.F.R. § 325.3, which may be in form and content as prepared by the Corps, however, the Notice: (a) shall explicitly call for comment on the possibility that the Corps may consider the application as eligible for verification under the Nationwide Permit Program; (b) shall specify explicitly which Nationwide Permits the Corps has in mind; and (c) shall explicitly solicit the comments of interested parties on that topic, as well as on the findings that must be made pursuant to 33 C.F.R. § 325.1(d)(2) and 33 C.F.R. § 330.2(i);

and

(3) in considering the decisions that must be made under 33 C.F.R. § 325.1(d)(2) or, under 33 C.F.R. § 330.2(i), the Corps shall specifically assess each of the points and issues on which the April 4, 2002 Memorandum For the Record has been found deficient in the relevant sections of the accompanying Memorandum Opinion, and, in its final decision document shall make specific written findings in respect of each such issue in a way that will permit meaningful judicial review of those findings and the reasoning underlying them; and

(4) the issuance of public notice, and the administrative procedures on remand, shall be accomplished by a district office of the Corps different than the district office which heretofore has been involved in considering the County's applications respecting the instant project; and

(5) the Corps shall report to the Court within fourteen (14) days respecting the most expedited schedule on which such tasks, on remand, can be accomplished.

The Clerk is directed to send a copy of this Order to all counsel of record.

It is so ORDERED.

214 F.Supp.2d 593, 55 ERC 1643

END OF DOCUMENT

DEPARTMENT OF THE ARMY
NORFOLK DISTRICT, CORPS OF ENGINEERS
FORT NORFOLK, 803 FRONT STREET
NORFOLK, VIRGINIA 23510-1096

CENAO-TS-G 4 April 2002

MEMORANDUM FOR THE RECORD

SUBJECT: Permit Application Evaluation and Decision for Application Number 01-V2032 Submitted by Hanover County Department of Public Utilities

1. Location of the Proposed Work: The project is located in the Pamunkey River, in headwater wetlands that drain into Totopotomoy Creek, a tributary to the Pamunkey River, and in non-tidal wetlands of Beaverdam Creek in Hanover County, Virginia.

2. Description of the Proposed Project: The project consists of the Totopotomoy wastewater treatment plant on Totopotomoy Creek, a discharge forcemain (5 jurisdictional crossings bored), a discharge structure on the Pamunkey River, and the Lee Davis pump station and forcemain on Beaverdam Creek. The applicant's drawings are attached.

Forcemain Crossings: Approximately 8.5 miles (45,000 linear feet) of 36-inch forcemain pipeline that will convey treated effluent from the Totopotomoy wastewater treatment plant along Tate Lane, Pole Green Road, Route 360 and along a farm road to the discharge point on the Pamunkey River has been completed. The forcemain was installed parallel to these existing roads and crossed jurisdictional areas in five locations along Pole Green Road (Route 615)

and Route 360. These five headwater stream crossings (waters of the U. S.) were all accomplished by boring (drilling) beneath the jurisdictional areas and did not, therefore, impact wetlands or waters of the U. S. With this method, there is no disturbance within the jurisdictional area and all construction and staging is accomplished on the adjacent upland. Although no wetland impacts were associated with this portion of the project and no DOA permit was required for these crossings, the as built conditions were observed to ensure that no jurisdictional areas had been impacted and were found to be acceptable. (See figure 01-V2032-1 for typical bored crossing.)

Outfall Structure: At the end of the forcemain pipeline, the applicant proposes to construct a discharge outfall structure that will include a cascade aerator and a 36-inch discharge pipe with four 18-inch riser diffusers installed within a trench in the bottom of the Pamunkey River. The outfall will be located in the upper reaches of the Pamunkey River on its west bank approximately 1.9 miles downstream of the Route 360 Bridge in the freshwater tidal portion of the river (Latitude 37° 40' 00", Longitude 77° 11' 32"). The river is approximately 100 feet wide and bends at this location. The diffuser pipe will extend about 60 feet from the base of the bank with only the diffuser structures sitting above the river bottom. The diffusers will be under approximately 10 feet of water at ordinary high water. Stone bedding material will be placed in the trench under the pipe and the river bottom will be restored to pre-project elevations. The work area in the river will be surrounded by a turbidity curtain. Hanover County has designed the re-aeration structure and discharge diffuser for a minimum average capacity of 15 mgd, however, the outfall will have a daily rate of discharge of 10 mgd. The purpose of the cascade aerator is to add oxygen to the treated effluent in order to comply with the conditions of

the VPDES permit. The natural slope of the bank will facilitate this type of stair-step construction. The approximately 40-foot high bank will be cleared of vegetation and graded to the correct slope. According to the applicant, disturbance of the wooded
bank will vary from 20 feet wide at the bottom to 80 feet wide at the top. No wetland vegetation exists on the bank. The installation of the discharge pipe and diffusers will temporarily impact 207 square feet of non-vegetated subaqueous bottom (0.0048 acres). Material removed from the river bottom and from the slope will be disposed of in an off-site non-wetland area at Luck Stone. Riprap will be placed both above and below the ordinary high water level and an erosion matting material will be placed on the bank to stabilize the slope and prevent erosion. The natural river flow and river bottom slope should serve to keep the area free of sediment and debris. (See figure 01-V2032-2 for view of discharge location from top of slope.)

Lee Davis Pump Station: The proposed Lee Davis Road Pump Station will be constructed on an approximately 0.5-acre upland area adjacent to Beaverdam Creek at the intersection of Lee Davis Road(Route 643) and Old Hickory Road (Latitude 37° 37¢ 10¢¢, Longitude 77° 20¢ 26¢¢). An existing 24-inchtrunk sewer line already crosses the wetlands in this location within an existing 25-foot wide sewer easement. An approximately 80-foot long, 24-inch gravity sewer line will be constructed from the pump station within a proposed 30-foot wide utility easement to intersect with the trunk sewer line at a 48-inchdiameter diversion structure and manhole. A 70-foot long, 16-inch forcemain from the pump station will be constructed parallel to the gravity sewer line and then parallel to the existing 24-inch trunk sewer line east for about 100 feet to Lee Davis Road within the existing 25-foot wide easement. The remaining 4.2 miles(22,000

linear feet) of the forcemain from the pump station to the proposed treatment plant will be constructed outside of the Corps' jurisdiction on the upland along Lee Davis Road, Pole Green Road and Tate Lane. Approximately 30 square feet of vegetated wetlands (0.0007 acres) will be permanently impacted by the construction of the diversion structure. An estimated 5,600 square feet of wetlands(0.1285 acres) will be temporarily impacted by the gravity sewer and forcemain crossings of Beaverdam Creek. The pipes will be installed in an open-cut trench. Excess material will be disposed of off-site in anon-wetland area. After installation of these pipes, the substrate will be restored to grade and allowed to revegetate with the existing scrub-shrub community. (See figure 01-V2032-3 for sewer line location in Beaverdam Creek. Figure 01-V2032-4 shows the upland location of the Lee Davis pump station.)

Totopotomoy Wastewater Treatment Plant: The proposed Totopotomoy wastewater treatment plant is located on a 128-acre site at the end of Pole Green Park Lane, off Pole Green Road (State Route 627) on Totopotomoy Creek, a tributary to the Pamunkey River (Latitude 37° 39¢ 03¢¢, Longitude 77° 18¢ 50¢¢).Work on the wastewater treatment plant began in August 2000, and the filling of wetlands at the site was completed in October 2000 under Nationwide Permits which were later invalidated by a decision of the United States District Court.

As constructed, the wastewater treatment plant has impacted a total of 0.1617 acres (7,044 square feet) of forested headwater wetlands. Approximately 0.1317 acres of non-tidal forested (5,738 square feet) and scrub-shrub wetlands and 0.0200 acres (871 square feet) of waters of the U. S. (239 linear feet of headwater intermittent stream) were impacted by grading and site preparation in conjunction with

the construction of the proposed influent pump station and drainage improvements. A portion of the foundation for the influent pump station has been constructed below grade. Another 0.0100 acres (435 square feet) of forested headwater wetlands have been impacted by the placement of fill in the preparation of a pad for a future biological treatment tank. No other wetland impacts are associated with this component of the project. (Figure 01-V2032-5 shows the edge of fill in the area downslope of where the headwater wetlands were filled for the construction of the pad. Figure 01-V2032-6 shows the slope and the area where the forested headwater wetlands and waters of the U. S. were filled for preparation of the site for construction of the influent pump station.)

Proposed Wetland Mitigation: As compensation for the total of 0.1624 acres of permanent wetland impacts(7,074 square feet), Hanover County proposes to mitigate either by contributing to the Virginia Wetlands Restoration Trust Fund (at a compensation ratio of 2 to 1 for forested wetland impacts, 1.5 to 1 for scrubshrub wetland impacts, and 1 to 1 for waters of the U. S. impacts), or by the construction and preservation of a multi-project mitigation site on the wastewater treatment plant property (7.83 acres wetland preservation, 0.82 acres wetland creation, and 1.31 acres riparian buffer). Any excess mitigation offered could potentially be used as compensation for future County projects within the Totopotomoy Creek watershed.

3. Purpose and Need of the Proposed Work: The applicant's stated purpose for the project is to provide additional wastewater treatment capacity so that the County may implement their adopted comprehensive plan for "Smart Growth", limiting high density, suburban-style growth to a small portion of the County(20%) and preserving the rural character of the remainder of the County. The plan provides

public utilities in the Suburban Service Area in 5-year incremental phases of controlled growth. The County's Beaverdam pump station currently pumps sewage to Henrico County across the Chickahominy River through a 24-inchline. Hanover County will continue their contract for 5.4 mgd of wastewater treatment on a peak rolling 90-day average with Henrico County. However, Hanover County expects that they could exceed this allotted sewage flow as early as the spring of 2003, and will need to provide additional treatment capacity to accommodate their anticipated 3 to 4% growth for the next 7 to 10 years.

Because Hanover County's stormwater system ties into their sewage system, actual wastewater flows fluctuate with the amount of precipitation. Hanover County is currently under their projections for wastewater flow to Henrico primarily due to the extended drought conditions the entire region has been experiencing. However, this has not always been the case. For example, in 1998, wastewater flows to Henrico were at 4.5 mgd, which was over the County's projection for that year. Exact predictions for sewage flow are not possible because future weather conditions and the precise number of new connections to the system are unknown. Since 1998, Hanover County has added over 1,500 new customers to their sewer system. Another 4,000 lots currently zoned for development could be connected to the sewer system at any time. These 5,500 units would add up to 1.9 mgd to Hanover's average flow.

The Totopotomoy wastewater treatment plant will have an initial capacity of 5 mgd, with a currently planned expansion to a capacity of 15 mgd to meet the needs of the County through 2030. The plant has been designed so that if required, it can eventually be expanded to a 30 mgd facility in 5 mgd increments. The proposed Lee Davis Road pump

station and forcemain will replace the previously proposed Totopotomoy interceptor extension as the initial source of wastewater supply for the proposed wastewater treatment plant in quantities nearly comparable to the Totopotomoy interceptor. The reduction in the flow being sent to Henrico County by the construction of the Lee Davis pump station and forcemain will allow for the continued transfer to Henrico County of sewage flow collected in the Totopotomoy Creek basin. As needed in the future, other wastewater conveyance projects will connect to the wastewater treatment plant.

4. Project History: The project has been considered by the Corps under four permit numbers: preapplication99-R0875 for the Totopotomoy interceptor, Totopotomoy wastewater treatment plant, five wetland crossings of the forcemain, and the outfall structure on the Pamunkey River; permit application 99-V1877 for the Totopotomoy wastewater treatment plant, five wetland crossings of the forcemain, and the outfall structure on the Pamunkey River; permit application 00-V1332 for the Totopotomoy interceptor alone; and permit application 01-V2032 for the currently proposed Totopotomoy wastewater treatment plant, the outfall structure on the Pamunkey River and the Lee Davis pump station.

The Corps determined that the outfall structure on the Pamunkey River, the Totopotomoy wastewater treatment plant and the three wetland crossings of the forcemain represented a single and complete project with independent utility from the Totopotomoy interceptor. In a letter dated 7 June 2000, the Norfolk District verified that Hanover County's application 99-V1877 for work in wetlands and waters of the U. S. for the construction of the outfall structure, the Totopotomoy wastewater treatment plant and

the three wetland crossings of the forcemain would be minimal and satisfied the criteria of the Corps' Nationwide Permits. These authorizations were later invalidated by a decision of the United States District Court.

The outfall structure and diffuser were found to satisfy the criteria of the Corps Nationwide Permit 7 with a special condition requiring submittal of the method of construction access and installation prior to commencement of any work in waters of the U. S. The means and methods that the contractor planned to utilize for installation of the outfall structure were approved by the Norfolk District on 9 July 2001. While commenting on permit application 00-V1332 for the Totopotomoy interceptor, the National Marine Fisheries Service's letter of 31 August 2000 made a recommendation for a time-of-year restriction for the protection of anadromous fisheries in the Pamunkey River. Accordingly, in a letter dated 3 October 2000,the Norfolk District modified the Nationwide Permit authorization to include a special condition prohibiting construction of the outfall structure from 15 February through 30 June of any year in order to protect spawning and nursery habitat for anadromous fish. The wetland crossings associated with the forcemain were found to satisfy the criteria contained in the Corps Nationwide Permit 12 with special conditions to minimize clearing through jurisdictional areas and to prevent drainage of the wetlands. These permitted crossings were later constructed by directional boring, a method that did not require Corps authorization. The filling of wetlands and waters of the U. S. in conjunction with the construction of the treatment plant was found to satisfy the criteria contained in the Corps Nationwide Permit 26.

On 25 July 2000, the Norfolk District asserted discretionary authority over the Totopotomoy interceptor(00-V1332) after

determining that the individual and cumulative impacts may be more than minimal. The majority of the pipeline for the Totopotomoy interceptor would have been within wetlands adjacent to Totopotomoy Creek and would have required six crossings of Totopotomoy Creek. As originally proposed, the project would have resulted in the permanent conversion of 9 acres of wetlands (forested converted to scrub-shrub) and temporary impacts to 22 acres of wetlands for construction access. The wetland impacts were later reduced to 3.6 acres of permanent conversion and 8.5 acres of temporary impacts for construction access.

The principal opponents of the project (Mrs. Frances Crutchfield and her son, Henry Broaddus) brought suit against the Corps in U. S. District Court on 8 August 2000 claiming that the Corps' actions were in violation of the Clean Water Act, the National Environmental Policy Act, the National Historic Preservation Act, and the Administration Procedures Act. The Court ruled on 14 August 2001 that the Nationwide Permit verifications were invalid and remanded the case to the Corps to evaluate the Totopotomoy interceptor with the remaining project components as a single and complete project.

Work on the Totopotomoy wastewater treatment plant had begun in August 2000, and the filling of wetlands at the site was completed in October 2000. Construction of the outfall structure had not commenced before the permit was invalidated by the Court decision. Hanover County installed all five forcemain wetland crossings by boring method and did not utilize the Nationwide Permit 12 authorization.

On 16 November 2001, Hanover County submitted a new application (01-V2032) proposing the construction of the Lee Davis pump station in lieu of the originally proposed Totopotomoy interceptor. The remainder of the project (treatment

plant, forcemain and discharge outfall) remains the same as originally proposed. At the same time, the County formally withdrew their application for the Totopotomoy interceptor.

In a brief dated 27 November 2001, Mrs. Crutchfield and Mr. Broaddus (plaintiffs) alleged that Hanover County's permit application fails to "fully and fairly disclose all of the activities the County has planned that(1) are 'reasonably related' to this project, and (2) will require Corps authorization." The plaintiffs claim that the proposed Lee Davis Road pump station will serve a completely different area of the county than the Totopotomoy Interceptor and that the County intends to provide wastewater collection and treatment services to areas within the developing Totopotomoy Creek watershed and others. They alleged, therefore, that the overall project will actually have greater impacts than those disclosed to the Corps, rather than lesser impacts.

In response, Hanover County indicated in their brief dated 29 November 2001 that the proposed Lee Davis pump station would replace the formerly proposed Totopotomoy interceptor as the source of wastewater supply for the Totopotomoy wastewater treatment plant. The County also indicated that on 28 November2001, the Board of Supervisors had voted to amend the Wastewater Treatment Facility Capital Improvement Plan to replace the interceptor extension with the Lee Davis pump station. Therefore, there is no longer funding for the interceptor extension and the County has indicated that they have no current plans to pursue the project. Hanover County stated that the Comprehensive Plan does not require the construction of the interceptor extension, rather it requires that the County provide sewer capacity in an area when it comes into phase, but does not require that specific collection lines be constructed. Although the interceptor sewer extension would have originally been the most likely way of providing sewer collection in the Totopotomoy basin, it is not the only way to provide sewer capacity. Sewer capacity for a portion of the area had been provided in 1998 by the Shelton Pointe pump station.

On 6 December 2001, the Corps met with Hanover County and DEQ to discuss the County's future plans so that the Corps could determine if any of those activities would be reasonably related to the currently proposed project. The County explained that the interceptor extension was originally proposed to provide initial flow to the Totopotomoy wastewater treatment plant from the existing pump station No. 5 to offload wastewater being sent to Henrico County and to provide enough flow to economically operate the wastewater treatment plant. Although the Lee Davis pump station will serve a portion of the Beaverdam Creek basin rather than the Totopotomoy Creek basin that would have been served by the Totopotomoy interceptor, the resultant reduction in flow being sent to Henrico County will allow for the continued transfer to Henrico County of sewage collected in the Totopotomoy Creek basin. Furthermore, the Lee Davis pump station will provide wastewater flow to the Totopotomoy wastewater treatment plant in quantities nearly comparable to the Totopotomoy interceptor and will allow Hanover County to remain within its contractual limits of 5.4 mgd of treatment capacity with Henrico County for an additional 7 to 10 years with the anticipated 3 to 4% growth. The County stated that when the Lee Davis pump station comes on line, flow from the existing Shelton Pointe pump station would be diverted from Henrico County to the proposed treatment plant through the Lee Davis pump station. Later, when warranted by development, the replacement of a portion of the proposed 16-inch pipe from the Lee Davis pump station with a 20 to 24-inch pipe and other upgrades to the Shelton Point pump station would provide additional capacity for the Totopotomoy service area well beyond the anticipated 10-year period. This alternative would eliminate the need for the originally proposed Totopotomoy interceptor in the reasonably foreseeable future.

The County presently anticipates much less development (with less demand for sewer service) along the originally proposed interceptor route than was expected when it was originally added to the Comprehensive plan. Large tracts of land have been designated as historic districts (Totomoi

Historic District and Rural Plains Historic District), and the County's hopes to attract a chip plant to locate within the county did not materialize. The County anticipates that the existing Avondale Pump Station, Berkeley Forest Pump station, Royal Glen Pump Station and Pump Station No. 5, (all of which currently send flow to Henrico County and are expected to continue to do so for the next 7 to 10 years) would continue to serve their respective areas of the county. Upgrades of the Avondale and Number 5 pump stations to allow for additional flow, if needed, would involve larger pumps and possibly a new force main along Route 301.The County also indicated a new pump station for the Powhite Creek basin may be constructed as early as2007 to pump flow to Henrico or to the new treatment plant in order to offload more flow from Henrico in the future. Although the County does not claim that some portion of the interceptor will never be built in the future by the County or others, they have stated that their more detailed evaluation does not justify spending $7 million for a new interceptor when they have much less expensive options to satisfy their needs for the next 7 to 10 years which can be phased in as needed.

The Corps regulations at 33CFR 325.1(d)(9) state that an application for an individual permit will be considered complete when sufficient information is received to issue a public notice and the issuance of a public notice will not be delayed to obtain information necessary to evaluate an application. According to33CFR 325.1(d)(2), all activities which the applicant plans to undertake which are reasonably related to the same project and for which an individual Department of the Army permit would be required should be included in the same permit application and district engineers should reject as incomplete any such application which fails to comply with this requirement.

The County has formally withdrawn their permit application (00-V1332) for the Totopotomoy interceptor and outlined a number of future options for handling sewage within the County that do not involve the construction of the Totopotomoy interceptor. Furthermore, the proposed Lee Davis pump station will provide virtually the same initial flow to the Totopotomoy wastewater treatment plant as would the Totopotomoy interceptor. Based on the above, the District Engineer determined prior to the issuance of the public notice that Hanover County has fully disclosed all of the activities that are reasonably related to the project, and that the application before the Corps is for a single and complete project with independent utility from the previously proposed Totopotomoy interceptor as well as from any future improvements to the conveyance of wastewater within the County.

The Norfolk District began a public interest review of the new application under an individual Department of the Army permit. A 30-day Public Notice was issued on 11 December 2002 with expiration on 11January 2002. At the request of the U. S. Fish and Wildlife Service, the principal opponents and other opponents of the project, the comment period was extended to 25 January 2002. A field meeting to hear the concerns of the principal opponents was conducted on 18 January 2002. Mrs. Crutchfield, Mr. Broaddus and their attorneys and consultants outlined their concerns about water quality, inclusion of the Totopotomoy interceptor as part of the project, consideration of other alternatives and potential effects to anadromous fish in the Pamunkey River.

A site visit was conducted by Corps staff on 14 December 2001 in order to verify the wetland impacts of the previously proposed portions of the project and to evaluate the potential impacts of the newly proposed Lee Davis pump station.

Based on the findings of the 14 December 2001 field evaluation and other field observations, as well as a desk-top review of information available at the time, it was concluded that the magnitude of the proposed and completed impacts on wetlands and waters of the U. S. are minimal, both individually and cumulatively and would qualify for authorization under general permits. The originally proposed Totopotomoy interceptor has been replaced by the proposed Lee Davis pump station. The wetland impacts associated with the Totopotomoy interceptor are neither a part of the project that is before the Corps nor are they in their entirety reasonably foreseeable cumulative impacts of the project. Therefore, it appeared that the proposed discharge outfall structure would qualify for Nationwide Permit 7; the completed wetland impacts at the Totopotomoy wastewater treatment plant would qualify for Nationwide Permit 39; the proposed utility line activities at the Lee Davis pump station would qualify for Nationwide Permit 12; and the proposed diversion structure and manhole would qualify for Nationwide Permit 18. However, this preliminary determination was contingent upon verification that the project would meet the other terms and conditions of these Nationwide Permits as well as a review of comments received from state, federal and local agencies and the general public in response to the Corps' Public Notice. According to 33 CFR 330.4(e)(3), "The division or district engineer will restore authorization under the NWPs at any time he determines that his reason for asserting discretionary authority has been satisfied by a condition, project modification or new information."

5. Wetland Impacts: Hanover County is seeking authorization for 30 square feet (0.0007 acres) of permanent and 5,600 square feet (0.1285 acres) of temporary wetland impacts associated with the proposed Lee Davis pump

station as well as authorization for the completed 7,044 square feet (0.1617 acres) of permanent impacts to non-tidal headwater wetlands associated with the construction of the treatment plant, and temporary impacts to 207 square feet (0.0048 acres) of subaqueous bottom in the Pamunkey River for the installation of the discharge pipe. No impacts to wetlands occurred during the construction of the five completed forcemain crossings of jurisdictional areas. The project would result in a total of 7,074 square feet (0.1624 acres) of permanent impacts and 5,807 square feet (0.1333 acres) of temporary impacts.

The wetland delineation for the treatment plant site submitted by Timmons, Inc. on 11 September 1998 for project number 98-E152 was verified by the Corps in a jurisdictional determination and wetlands delineation confirmation letter dated 9 November 1998. As stated in the letter, the confirmation of delineation is valid for a period of 5 years from the date of the letter (until 9 November 2003).

A wetland delineation that was submitted on 17 October 1997 by Timmons, Inc. on behalf of Kimley-Horn and Associates, Inc. for the extension of Old Hickory Road (97-E134) was verified by the Corps in a confirmation of wetland delineation letter dated 3 December 1997. As stated in the letter, the confirmation of delineation is valid for a period of 5 years from the date of the letter (until 3 December 2002). The Corps' confirmation of jurisdictional areas on approximately 12.46 acres of land included the area where the pump station is now proposed as well as a portion of the wetlands where the utility line easement will cross. The field jurisdictional determination on 14 December 2001 confirms that the proposed pump station would-be constructed on uplands. A portion of the proposed 30-foot wide utility easement would fall within the palustrine

forested wetland fringe depicted on the 1997 Timmons delineation and the remainder of the utility lines and the junction box would be constructed in waters of the U. S., including a scrub-shrub wetland community within the proposed and existing utility easements.

Avoidance and Minimization: In selecting the proposed Totopotomoy wastewater treatment plant site, Hanover County chose a site where wetlands could be largely avoided because they are located along the fringes of the property. Design plans for the construction of the wastewater treatment plant further reduced the potential for wetland impacts. By locating and orienting the footprint in the central portion of the property, impacts to forested headwater wetlands on the eastern portion of the property will be avoided with future expansions. Furthermore, maintaining a vegetated upland buffer between the facility and the wetlands and waters of Totopotomoy Creek will further reduce indirect impacts to these resources.

Even with these measures to reduce wetland impacts, the filling of 0.16 acres of jurisdictional wetlands and waters of the U. S. in the northern portion of the treatment plant site was integral to the original treatment plant design and was unavoidable. These wetlands were impacted by grading and site preparation in conjunction with the construction of the influent pump station and drainage improvements. The County no longer proposes to continue constructing the influent pump station (see Section 11, below) and all existing structures will be removed to 4 feet below the surface and the area will be filled, graded and seeded. Without the influent pump station, these wetland impacts most likely could have been avoided. However, restoration of the wetlands in their original location is not feasible, because a sedimentation basin required to prevent sediment from entering

Totopotomoy Creek and other required grading for drainage improvements and erosion and sediment controls will continue to impact this same area.

During the final design of the Lee Davis pump station, the County was able to modify their plans for the structure intersecting the proposed gravity sewer line to the existing trunk sewer line to further avoid permanent wetland impacts. The originally proposed 240 square feet of wetland impacts for the construction of a junction box have been reduced to 30 square feet for the construction of a diversion structure and manhole.

Wetland Compensation: A sedimentation basin has been constructed at the bottom of the slope below the influent pump station site (see figures 01-V2032-7 and 01-V2032-8). The applicant proposes to establish a multi-project wetland mitigation site in this location as one of their mitigation options. The site would provide 7.83 acres of wetland preservation, 0.82 acres of wetland creation, and 1.31 acres of riparian buffer which could potentially be used as compensation for future County projects within the Totopotomoy Creek watershed. However, mitigation planting cannot begin until the basin is no longer needed to control sedimentation from the work site. Hanover County anticipates that if construction at the site is allowed to resume, the treatment plant will be completed in 12 to 24 months. The DEQ's VWPP permit would require that mitigation commence before that time, therefore, DEQ would prefer that the County utilize their other stated mitigation option of contributing to the Virginia Wetlands Restoration Trust Fund.

The Virginia Wetlands Trust Fund provides permittees an additional mechanism to compensate for wetland impacts

authorized by Corps permits under section 404 of the Clean Water Act. The Trust Fund is managed by the Nature Conservancy (TNC) in accordance with a Memorandum of Understanding with the Corps. TNC is a passive recipient of mitigation funds and submits proposals to the Corps for the expenditure of funds to restore, create, enhance, and preserve wetlands. The proposed compensation ratio for contribution to the Trust Fund is 2:1 for forested wetland impacts, 1.5:1 for scrub-shrub wetland impacts, and 1:1 for waters of the U. S. impacts. The sediment basin appears to be a suitable site for the establishment of wetlands. It is adjacent to existing wetlands and if properly graded and planted, should support wetland vegetation. The Norfolk District is equally satisfied that the proposed in-lieu fee contribution to the Virginia Wetlands Restoration Trust Fund would be appropriate for this minimal level of wetland impacts. On 20 February 2002, DEQ issued their VWP General Permit for this project including a contribution of $42,759 to the Virginia Wetlands Restoration Trust Fund as compensation for the associated wetland and intermittent stream impacts.

EPA's Region III Acting Director of the Office of Environmental Programs considers the wetland impacts to be minimal. He stated in his 4 February 2002 letter: "EPA has considered the impacts to wetlands associated with this project, and has concluded that these impacts will be minimal, and acceptable, provided that the compensatory mitigation proposed by the applicant is fully and effectively implemented."

The District Engineer concurs with EPA and DEQ that the magnitude of the proposed and completed impacts to wetlands and waters of the U. S. associated with this project are minimal and acceptable and concurs with DEQ's stated mitigation requirement for in-lieu fee contribution to the

Virginia Wetlands Restoration Trust Fund.

6. Historic Resources: A portion of the forcemain pipeline has been constructed along the Route 360right-of-way that passes through the boundaries of the Marlbourne National Historic Landmark (Register No. 66000837). Hanover County modified the proposed method of installation of the forcemain through the two crossings of waters of U. S. that fell within the limits of the Marlbourne National Historic Landmark to avoid wetland impacts. Therefore, there is no Corps jurisdiction over any of the completed work within Marlbourne. Also, the outfall location and a portion of the forcemain which runs parallel to an existing farm road lie approximately 150 feet north of the defined boundary of the archaeological site known as Newcastle Town (44HN860). Newcastle Town is listed on the Virginia Landmarks Register and is considered to be eligible for listing on the National Register of Historic Places. The Corps' Area of Potential Effect (APE)for the outfall structure is from the top of the bank to the end of the outfall in the Pamunkey River and is outside of the boundaries of Newcastle Town.

The Corps determined that based on the information submitted by the County, no historic resources listed or eligible for listing in the National Register of Historic Places have been found within the Corps' identified APE for this project. In accordance with coordination procedures between the Corps and the Virginia Department of Historic Resources, in a letter dated 4 May 2000, the Norfolk District provided the Corps' original opinion that Hanover County's proposal to construct the Totopotomoy wastewater treatment plant, forcemain and diffuser outfall will have no effect on historic resources within the APE.

In a letter dated 7 June 2000, the Virginia Department of

Historic Resources (VDHR) concurred with the Corps' findings and stated that project number 99-V1877 for the Totopotomoy wastewater treatment plant, forcemain and outfall discharge structure (VDHR File No, 98-0066) would have no adverse effect on historic resources.

The new permit application (01-V2032) was coordinated with VDHR by public notice. When the Norfolk District had not received comments on the Public Notice from VDHR at the end of the comment period, the project manager called VDHR on 30 January 2002 to seek the status of their comments. During this telephone conversation, the Corps' project manager identified the APE for the Lee Davis pump station to be the entire easement for the pipeline, but not the upland portion of the project. The APE for the remainder of the project had already been identified during the previous coordination.

In a letter dated 31 January 2002, VDHR indicated that their prior finding of no adverse effect, conditioned on coordination of design changes, is still valid for the sewer line, Totopotomoy wastewater treatment plant and outfall, and remains in effect; and also reached the same finding for the Lee Davis pump station. VDHR added the following condition to the no adverse effect finding: "The Corps will coordinate with the DHR regarding the potential development of a multi-project wetlands mitigation site at the wastewater treatment plant site." VDHR also advised that burials have been encountered elsewhere in the project area and that since the possibility of encountering additional burials exists within the present project boundaries, their office should be notified immediately if human remains are discovered during project implementation.

The District Engineer concurs with VDHR that as proposed

and completed, the outfall structure, Lee Davis pump station, Totopotomoy wastewater treatment plant and forcemain will have no adverse effect on any historic resources that are listed or eligible for listing in the National Register of Historic Places. The District will include VDHR's recommendations as conditions of any permit issued on this project.

7. Threatened and Endangered Species: During coordination for the VPDES permit for the originally proposed Totopotomoy wastewater treatment plant project (99-V1877), the U. S. Fish and Wildlife Service (FWS) commented to DEQ on the potential impacts to the federally listed endangered dwarf wedge mussel (Alasmidonta heterodon) in the area of the Pamunkey River within the influence of the proposed wastewater discharge. In a letter dated 11 March 1999 to DEQ, the FWS stated that they could not concur with the findings of the first survey for the dwarf wedge mussel and requested that another survey be conducted in May or June in the same area. In a letter dated 29 March 1999, EPA wrote to the Virginia Department of Environmental Quality that they had reviewed draft VPDES permit VA0089915 and had "no objection to the issuance of the permit." However, EPA did have concern for DEQ's consideration of the FWS's recommendation that a second freshwater mussel survey be conducted prior to issuance of the permit to ensure compliance with the Endangered Species Act. After review of the second survey, the FWS stated in a letter addressed to Hanover County's environmental consultants dated 8 September 1999 their opinion that appropriate habitat for the dwarf wedge mussel does not occur at the project site and found that the project is not likely to adversely affect the species.

DEQ indicated in a letter to the FWS dated 27 April 1999: "

The high degree of treatment required by the permit, the use of an effluent diffuser, the conservative assumptions made in the effluent mixing analysis and the use of UV light rather than chlorine for effluent disinfection all combine to make it highly unlikely for the discharge to have an impact should any endangered species exist in this reach of the Pamunkey River."

The new application (01-V2032) was coordinated with the FWS by public notice. No threatened or endangered species were identified on the Norfolk District's Threatened and Endangered Species database search of one minute Latitude and Longitude around each project location. However, a 15 January 2002letter from the Virginia Department of Conservation and Recreation's (DCR) Division of Natural Heritage indicated the potential for appropriate habitat within the project area for the federally listed threatened small whorled pogonia (Isotria medeoloides) which is also a state-protected plant. DCR recommended that the project site be surveyed for the species. In a letter dated 25 January 2002 responding to the Public Notice for application 01-V2032, the FWS maintained their earlier determination that the project was not likely to adversely affect the dwarf wedge mussel. They noted, however, that the project occurs within the range of the small whorled pogonia and recommended a survey within appropriate habitat at the project site. The Corps project manager confirmed with FWS staff that all of the project component locations were within the area that should be surveyed, and this information was relayed to the applicant. A letter dated 6February 2002 from Resource International, Inc. reported on the results of the investigation to identify potential habitat for the species and concluded that "none of the areas observed during this investigation meet the criteria for suitable habitat for the small whorled pogonia." In a letter dated 20 February 2002, the FWS stated

that after review of the report and discussion with Resource International, Inc., "... it is the opinion of the Service that appropriate habitat for this species does not occur at the project site and therefore, this project is not likely to adversely affect the small whorled pogonia."

The District Engineer concurs with the FWS that no component of the project will adversely affect a federally listed threatened or endangered species.

8. Water Quality: Water quality is one of the public interest factors considered by the Corps when conducting a public interest review. The issuance of the State's VPDES permit and VWPP/401 Water Quality Certification is considered conclusive with respect to water quality considerations unless the EPA Regional Administrator advises the Corps otherwise. Some commenters expressed concern that the State may not have fully considered the Section 303(d) listing of the Pamunkey River, the reduction in releases from Lake Anna, or other water quality concerns in their permit reviews. EPA reviewed Hanover County's VPDES permit as well as Virginia Power's VPDES permit for Lake Anna and did not object to these DEQ actions. Although the Corps is not required to validate another agency's permit process, the District Engineer has conducted a review of each of these factors to determine whether all issues were considered and addressed in the State's review of Hanover County's proposal.

a. Impaired Waters Status (303(d)): Section 303(d) of the 1972 Clean Water Act requires states to develop a list of impaired waters within their jurisdiction. Impaired waters are those that fail to meet water quality standards established by the state and based on criteria set by EPA. Numeric standards are set based on designated uses such as drinking

water, recreation and fish and wildlife uses. Virginia began developing its list in September 1997 after completing five-years of data collection between 1992 and 1997.Virginia submitted its draft report to EPA on 29 April 1998. A revised draft, based on EPA's comments, was made available for public comment in June of 1998. On 14 October 1998, Virginia submitted its final303(d) package to EPA.

On 16 November 1998 EPA issued a letter to DEQ partially approving and partially disapproving Virginia's303(d) list. EPA believed that waters on the State's non-inclusion list should be on the 303(d) list. Among those waters were the tidal York River and the tidal portions of the Pamunkey and Mattaponi Rivers. On30 December 1998, EPA notified the public of a public hearing and requests for comment in response to its intent to list the tidal portion of the Pamunkey River as well as other impaired waters.

On 11 May 1997, Hanover County applied for a permit under the Virginia Pollutant Discharge Elimination System (VPDES) for the proposed Totopotomoy wastewater treatment plant. The VPDES permit(VA0089915) was issued on 28 April 1999. According to DEQ memorandum written on the same day as issuance of the VPDES permit, the application was not complete until 13 October 1998, the day before the303(d) package was submitted to EPA. According to the same memorandum, EPA submitted comments on the VPDES permit application on 5 August 1998, 6 November 1998 and 29 March 1999. EPA's review of the VPDES permit overlapped with their review of Virginia's 303(d) list of impaired waters; and in their 29March 1999 letter to DEQ, EPA stated that they had no objection to the issuance of the permit(VA0089915). These comments were made three months after EPA had notified the public of their intent to include the Pamunkey River on Virginia's 303(d) list.

The District Engineer has concluded that EPA was aware of the impending 303(d) listing of the Pamunkey River at the time they reviewed and commented on Hanover County's draft VPDES permit. Furthermore, the District Engineer accepts the issuance of the VPDES permit as conclusive in that all water quality matters related to Section 303(d) and Section 402 of the Clean Water Act have been adequately addressed.

b. Numeric Criteria for Pollutants of Concern (poc's): Effluent limitations for poc's are established for 303(d) waters by individual waste load analyses. Models based on EPA criteria are used to model water quality characteristics upstream and downstream of the proposed effluent discharge location. The modeling results are used to establish effluent limitations sufficient to protect water quality standards for the receiving water. Initial modeling results for the Pamunkey River indicated that there is a significant degree of tidal mixing in the river at the outfall location and the project will, therefore, not impair water quality standards. However, DEQ determined that conventional models are inappropriate for use on tidal portions of the Pamunkey River and have instead relied on best professional judgement. A DEQ memorandum dated 2 June 1997 recommended effluent limitations, based on their staff's best professional judgement, set at 10 mg/l for Biochemical Oxygen Demand (BOD), 10 mg/l for Total Suspended Solids (TSS), and 3 mg/l for Total Kjedahl Nitrogen (TKN); or 10-10-3.

DEQ believed the best professional judgement approach was warranted based on the difficulty of modeling tidal systems and the concern that dissolved oxygen (DO) in the river is fully allocated. According to a 13October 2001 letter to

VIMS, DEQ stated that domestic sewage contains approximately 3.0 mg/l of nitrogen compounds that are not subject to biological degradation. Adding nitrogenous compounds increases microbial activity which places additional demand on DO levels. DEQ has concluded that limiting effluent TKN to 3.0 mg/l achieves water quality standards established for DO in the river. Also, in response to public comments concerning DO, the VPDES permit holds Hanover County to a higher standard for the discharge than would normally be required. The VPDES requires that the dissolved oxygen level of the effluent from the Totopotomoy wastewater treatment plant be increased to 6.5 mg/l rather than the usual standard of 5.0 mg/l. The proposed cascade aerator will add oxygen to the treated effluent in order to comply with this condition of the VPDES permit.

An internal DEQ memo dated 9 March 1987 recommended the 10-10-3 restriction for those waters that cannot be modeled by conventional methods. The memo stated that DEQ's experience in applying modeling technology to small streams indicates that the 10-10-3 limits are representative of effluents that are self-sustaining. Self-sustaining levels are those that normally will not violate stream standards.

DEQ considers the "self-sustaining" standard of 10-10-3 to be valid regardless of flow regimes. The Virginia Institute of Marine Science (VIMS) modeled dilution characteristics to assess instream waste concentrations for both 5mgd and 10 mgd scenarios. Modeling results indicate that flows in the river in combination with tidal current velocities and the use of a "diffuser" will provide for a complete mix of effluent. These results have led DEQ to conclude that the 10-10-3 limits will neither contribute to substantial increases in BOD, nor add oxygen demanding substances to the river at either the 5 mgd or 10 mgd discharge rates. Also, VPDES permit

conditions require Hanover County to submit a plan of action detailing continued compliance with the permit conditions when influent flows reach 95 percent of the design capacity.

In a letter to VIMS dated 13 October 2000 DEQ stated that, given a moderate degree of dilution, limits similar to those in the VPDES permit ".....have resulted in impacts in the receiving stream that are generally very difficult or impossible to distinguish by routine monitoring." DEQ further stated that "Given that there is approximately 4:1 dilution available for the effluent, it is unlikely that the permitted limits will result in elevating the cBOD5 concentration in the river by more than about 2 mg/l beyond that naturally occurring." DEQ stated their belief that "...the stream will be able to assimilate the additional concentration without any significant lowering of the existing quality." In addition, any changes to effluent flow rates beyond the permitted flows will require a permit modification. This will result in additional public comment and an evaluation of water quality impacts by DEQ. In the same letter, DEQ stated "...although the permit does not directly limit flow, the permittee cannot increase the effluent flow beyond the current design flow without a permit modification and the public review and comment that is part of such a modification."

The District Engineer has concluded that the effluent limits established by DEQ, based on their extensive experience in employing similar methodologies to waters that cannot be modeled by conventional means, are not unreasonable and are within their purview. Impacts from poc's should be minor.

c. Lake Anna Releases: The Virginia Power-North Anna Nuclear Power Station operates Lake Anna, located on

the North Anna River, a tributary to the Pamunkey River. The VPDES permit under which Virginia Power operated was due to expire on 2 October 2000. An application for the re-issuance of the permit was received by DEQ on 5 April 2000 and forwarded to EPA for comment. A public meeting was held on 7 June 2000, the draft Lake Level Contingency Plan (LLCP) was sent for comments on 1 August 2000, and a public hearing was held on 6 November 2000. According to a DEQ memorandum dated 17 November 2000, EPA and the Virginia Department of Health notified DEQ that they had no objections to the re-issuance of the permit.

The DEQ memorandum also stated that recent legislation required any VPDES permit issued for a surface water impoundment designed to provide cooling water to power generators must contain a Lake Level Contingency Plan (LLCP). The LLCP contains measures to minimize adverse impacts to downstream users in the event releases must be reduced during drought conditions. The LLCP provides for the operators of Lake Anna to reduce flows from 40 cfs to 20 cfs when the lake water level drops below designated levels due to drought conditions. The LLCP stipulates that flows may not be reduced below 20 cfs and that DEQ and the downstream users (Hanover County Public Utilities, Bear Island Paper Company, Engel Farms, Inc. and the Pamunkey Indian Tribal Government) must be notified 72 hours in advance. Releases from Lake Anna may not be such that established water quality standards downstream are impaired or numeric criteria for poc's violated. DEQ requires monitoring in the North Anna River when flows are reduced below 40 cfs. Furthermore, if a downstream user identifies an adverse effect and DEQ concurs, releases must be returned to 40 cfs in 5 cfs increments.

During public comment on the LLCP, DEQ addressed the

potential for reduced flows from Lake Anna to affect the Totopotomoy wastewater treatment plant's compliance with its VPDES permit. In their response to comments, DEQ stated that the wastewater treatment plant's VPDES permit and its compliance with the permitted effluent limitations should not be affected.

Although DEQ was not aware that flows from Lake Anna would be reduced when the VPDES permit was issued for the Totopotomoy wastewater treatment plant, DEQ has since stated that the limits allowed under 10-10-3 protect water quality regardless of river flow or effluent discharge rate. DEQ does not believe that these flow changes would interfere with the capacity of the waterbody to assimilate and process pollutants or to maintain State-established water quality standards.

The District Engineer has concluded that DEQ appropriately considered the effect of reduced flows from Lake Anna on the effluent limits set for the Totopotomoy wastewater treatment plant. Furthermore, the District Engineer has concluded that sufficient administrative and regulatory controls are in place to ensure that water quality standards in the Pamunkey River are met downstream of Lake Anna.

d. Federal Agency Comments on Water Quality: In a letter dated 25 January 2002, commenting on application 01-V2032, the FWS expressed concern for the potential degradation of water quality and cited water quality issues that they believe should be addressed by the Corps in consultation with EPA: (1) federal listing under Section 303(d) of the Clean Water Act of the Pamunkey River as an impaired water due to violations of the dissolved oxygen (DO) water quality standard, (2) reduction in minimum releases from Lake Anna, (3) potential for impacts to

anadromous fish spawning and nursery habitat from possible reduction in DO, and (4) determination that there are no anthropogenic sources causing or contributing to the dissolved oxygen deficit in the Pamunkey River. The FWS recommended that the Corps require that the EPA reevaluate this project and its effects on the water quality of the Pamunkey River.

In a letter dated 4 February 2002, the Acting Director of the Office of Environmental Programs of EPA Region III EPA noted the concerns expressed in the FWS' 25 January 2002 letter and stated that "Most of these concerns appear to derive from events subsequent to the issuance of VPDES Permit No. VA0089915 for the facility." EPA suggested that the Corps work with EPA Region III and the Commonwealth of Virginia to ensure that Virginia's analysis of water quality impacts pursuant to Section 401 of the Clean Water Act considers the issues raised by the FWS letter.

The primary consideration of water quality impacts from effluent discharges has been vested by Congress with EPA. EPA has delegated this authority to the states and oversees their programs. According to the preamble to the Corps' Nationwide Permit Program implementing regulations (22 November 1991) at 33 CFR 330 regarding Nationwide Permit 7 for Outfall Structures, "It is the responsibility of EPA pursuant to Section 402 of the Clean Water Act to regulate the effluent of outfall structures. The Corps has responsibility for those activities associated with the construction of these structures." As the EPA letter was not signed by the Regional Administrator, the Corps regulations instruct the District Engineer to conclude that the effluent discharge complies with the provisions of Sections 401 and 402 of the Clean Water Act. Nevertheless, the Corps has reviewed the concerns expressed in the FWS letter and found

that the State has considered and satisfactorily addressed all water quality issues in their permit reviews. In a telephone conversation on 28 March 2002, District staff informed EPA that a review of the State's analysis documented that all issues had been considered in their permit reviews and the Norfolk District would consider the State's permit issuance as conclusive. EPA indicated that they were satisfied with the District's efforts and the Regional Administrator would not advise the District of other water quality aspects to be taken into consideration.

e. District Engineer's Findings on Water Quality: Sections 401 and 402 of the Clean Water Act are administered by the State of Virginia. Issuance of 401 water quality certification by the State is considered conclusive in that water quality requirements have been met. DEQ advised Hanover County on 9 November 1999, that a Virginia Water Protection Permit/401 Water Quality Certification (VWPP) would not be required for application 99-V1877 provided the County received and complied with a Corps of Engineers Regional or Nationwide Permit for which DEQ has waived or issued certification. After reviewing Permit application 01-V2032, DEQ issued their VWP General Permit/401 Water Quality Certification on 20 February 2002, stating that the activity "....if conducted in accordance with the conditions set forth herein, will protect instream beneficial uses and will not violate applicable water quality standards. The board finds that the effect of the impact, together with other existing or proposed impacts to wetlands, will not cause or contribute to significant impairment of state waters or fish and wildlife resources."

Similarly, the issuance of an NPDES permit by a state is also considered conclusive. Only in the event that the Regional Administrator of the Environmental Protection Agency

advises the Corps there are unresolved water quality issues under either Section 401 or 402, would the Corps conclude otherwise. The Corps' regulations at 33 CFR 320.4 (d) state: "Certification of compliance with applicable effluent limitations and water quality standards required under provisions of Section 401 of the Clean Water Act will be considered conclusive with respect to water quality considerations unless the Regional Administrator, Environmental Protection Agency (EPA), advises of other water quality aspects to be taken into consideration." As discussed above, EPA's review of Hanover County's VPDES permit coincided with their review and intent to include the tidal portions of the Pamunkey River on the 303(d) list. Given the fact that DEQ issued the VPDES permit and the EPA Regional Administrator has not otherwise advised the Corps that the permit is invalid, regulations instruct the District Engineer to conclude that the effluent discharge complies with the provisions of Sections 401 and 402 of the Clean Water Act.

As outlined above, the Virginia DEQ, as the permitting authority, has determined that the 10-10-3 restrictions will ensure compliance with numeric criteria established for the designated beneficial use of this section of the Pamunkey River. DEQ's reliance on 10-10-3 is the result of considerable experience in its application of modeling technology for small streams. These same effluent limits have been included in the permit conditions and reviewed by EPA. After reviewing the evidence and analytical results submitted by Hanover County, DEQ, the Virginia Department of Game and Inland Fisheries (VDGIF), VIMS and by the public, the District Engineer has concluded that all questions concerning effluent limits, DO and effects on aquatic life have been satisfactorily addressed. There is no reasonable evidence to conclude that impacts to water quality

would be more than minimal.

Therefore, the District Engineer has confirmed that the State agencies have considered and satisfactorily addressed all water quality issues in their permit reviews. DEQ has issued a VPDES permit with limits that will be fully protective of water quality in the Pamunkey River regardless of river flow or effluent discharge rate. EPA's Regional Administrator has not advised the Corps that either the VPDES permit or the VWPP/401 Water Quality Certification is invalid, therefore, the District Engineer accepts as conclusive that the effluent discharge complies with the provisions of the Clean Water Act.

9. Anadromous Fish:

a. VPDES Permit Review: In a letter to DEQ dated 4 February 1999, the Virginia Department of Game and Inland Fisheries (VDGIF) indicated that since spawning and nursery areas of anadromous fishes such as striped bass, river herring and American shad have been documented at the project site, they supported dissolved oxygen monitoring to prevent adverse impacts to these species. Also, because chlorine can act as a chemical barrier to anadromous fish migrations, VDGIF indicated in the 4 February 1999 letter that they supported Hanover County's use of ultraviolet disinfection to reduce impacts to aquatic biota.

DEQ's VPDES permit, issued on 28 April 1999, specifies effluent limitations, requires water quality monitoring of the effluent for cBOD5, suspended solids, TKN, total phosphorous, total nitrogen, fecal coliform, pH and dissolved oxygen; and requires biological toxicity monitoring of the effluent. In a letter to the U. S. Fish and Wildlife Service dated 27 April 1999 concerning potential impacts to

endangered species, DEQ stated: " The high degree of treatment required by the permit, the use of an effluent diffuser, the conservative assumptions made in the effluent mixing analysis and the use of UV light rather than chlorine for effluent disinfection all combine to make it highly unlikely for the discharge to have an impact should any endangered species exist in this reach of the Pamunkey River."

Because the Pamunkey River is already experiencing naturally occurring dips in dissolved oxygen, the VPDES permit holds Hanover County to a higher standard for the discharge than would normally be permitted. The usual minimum dissolved oxygen level of 5.0 mg/l has been increased to 6.5 mg/l for the Totopotomoy wastewater treatment plant effluent outfall in order to ensure the protection of fish and wildlife resources. In a letter dated 13 October 2000, DEQ responded to comments from VIMS regarding water quality concerns. DEQ stated that limits similar to those in the VPDES permit ".....have resulted in impacts in the receiving stream that are generally very difficult or impossible to distinguish by routine monitoring." DEQ further stated "Given that there is approximately 4:1 dilution available for the effluent, it is unlikely that the permitted limits will result in elevating the cBOD5 concentration in the river by more than about 2 mg/l beyond that naturally occurring." DEQ stated their belief that "...the stream will be able to assimilate the additional concentration without any significant lowering of the existing quality."

In a letter dated 20 October 2000 to VMRC, DEQ responded to comments in a 17 October 2000 letter from Dr. Paul Jacobson concerning potential effects of the sewage outfall from the Totopotomoy treatment plant on anadromous fish in the Pamunkey River. DEQ stated the following: "Dr.

Jacobson is correct that our agency is considering a permit modification that would allow Virginia Power to reduce minimum release flow from 40 cfs to as low as 20 cfs under severe drought conditions. However, the proposal under consideration includes a provision that would require the 40 cfs minimum release flow to be restored if any adverse effects are reported downstream. In the event of such a flow reduction from Lake Anna, the affected dischargers and DEQ staff would closely monitor conditions in the river. While we think that the 10-10-3 limits will be protective of water quality even under the reduced conditions, we would take appropriate steps to restore flow if significant dissolved oxygen reductions or other water quality problems are noticed."

The District Engineer has concluded that in issuing their VPDES permit, DEQ considered all applicable chemical, physical and biological measures to reduce impacts of the discharge to anadromous fish and other aquatic biota in the Pamunkey River.

b. VMRC Permit Review: VMRC advised Hanover County in a letter dated 27 October 2000, that their decision on the County's request to install a wastewater diffuser structure in the Pamunkey River had been deferred from the 29 August 2000 meeting so that the Commission staff could meet with representatives of DEQ and VIMS to further evaluate any water quality impacts the project might have on fishery resources. Their attached memo entitled "Habitat Management Division Evaluation" stated that Commission staff met with DEQ and VIMS representatives on 19 September 2000. In a Shoreline Permit Application Report dated 16 August 2000, VIMS recommended that construction of the outfall diffuser be avoided from mid-March through June to minimize adverse impacts on

anadromous fish. VIMS provided further comments to VMRC on impacts to anadromous fish in a letter dated 11 October 2000. VIMS commented on the potential for adverse effects in the Pamunkey River downstream of the proposed discharge and concluded, "Through our review of the environmental situation surrounding this project, which took into account the permitted effluent limits and discharges, we determined that the probability of occurrence of a DO sag event sufficient to adversely impact anadromous fish is low." ...and... "Our extended analysis has confirmed that the daily flows and effluent limits proposed for this treatment plant have a low probability of adversely affecting anadromous fish resources in the Pamunkey River. Future growth and growth patterns may change this conclusion but are beyond the scope of the present analysis." In their memo, VMRC stated: "Based on the VIMS assessment and the discharge permit limits established by DEQ, staff anticipates no adverse effects on fishery resources in the Pamunkey River from the project as currently proposed."

The Commission considered all documents in the official record, including agency comments and evidence provided by the County and protestants and voted at their regularly scheduled meeting on 24 October 2000 to approve the project contingent on the following conditions: 1) all areas of state-owned bottom and adjacent lands disturbed by the construction be restored to their original contours and natural conditions within 30 days of the date of completion of the work, 2) all excess materials shall be removed to an upland site and contained to prevent reentry into state waters, and 3) no work shall occur involving state-owned submerged lands during the period 15 March through 30 June in order to protect anadromous spawning species. The Virginia Marine Resources Commission permit, including these three special conditions, was issued on 18 December 2000.

The District Engineer has determined that in issuing their permit, VMRC considered all comments concerning potential adverse effects of the installation of the outfall to anadromous fish and addressed concerns for their protection in the special conditions of the VMRC permit.

c. Corps Permit Review: Potential adverse effects to anadromous fish were considered by the Corps and addressed in the special conditions of the District's original verification of compliance with Nationwide Permit 7. In a memo dated 15 February 2000, the Norfolk District requested comments and recommendations on construction methods for the proposed outfall structure from the National Marine Fisheries Service. In their 31 August 2000 comments on application 00-V1332 for the Totopotomoy interceptor, the NMFS indicated that anadromous fish have been collected in the proximity of the outfall site on the Pamunkey River and that the river is documented spawning and nursery habitat for alewife, striped bass, white perch, and yellow perch. The NMFS recommended that the permit be conditioned so that instream work is prohibited from 15 February through 30 June, that stream bottom contours be restored to their original elevation to prevent the creation of blockages, and that excavated material stored on site be stabilized and contained to prevent sedimentation during storm events. Accordingly, in a letter dated 3 October 2000, the Norfolk District modified the Nationwide Permit authorization to include a special condition prohibiting construction of the outfall structure from 15 February through 30 June of any year in order to protect spawning and nursery habitat for anadromous fish. The time-of-year restriction imposed by the Corps begins one month earlier than that imposed by VMRC. The permittee must abide by the most restrictive permit conditions. The NMFS did not respond to the Corps public notice for application 01- V2032.

In their 25 January 2002 comments on Public Notice 01-V2032, the FWS stated that the Pamunkey River provides spawning and nursery habitat for numerous anadromous fish. Instream dissolved oxygen levels, which can be exacerbated during low flow conditions, are critical to these species' reproduction success. A dissolved oxygen level of 5 milligrams per liter (mg/l) has been generally accepted as necessary to the survival of anadromous fish eggs, larvae and juveniles. The State-established standard for dissolved oxygen limits has been set at 5.0 mg/l for this portion of the Pamunkey River primarily for the protection of aquatic life. However, because the Pamunkey River is already experiencing naturally occurring dips in dissolved oxygen, DEQ has increased the required level to 6.5 mg/l for the Totopotomoy wastewater treatment plant effluent outfall in order to ensure the protection of fish and wildlife resources.

The District Engineer has determined that potential adverse effects to anadromous fish have been adequately considered and addressed in the state and federal reviews of the permit applications for the proposed discharge outfall on the Pamunkey River. A time of year restriction prohibiting construction of the outfall structure from 15 February through 30 June of any year would be included as a special condition of any permit issued on this project. While there is some potential for minor impact, the various protective conditions included in the necessary permits should minimize any such impact. Although impacts to fish and wildlife resources is a Corps Public Interest Review consideration, primary consideration of water quality impacts from effluent discharges is vested by Congress with EPA, as delegated to the states.

10. Socioeconomics:

a. Native Americans: A letter dated 6 August 2000 was received from the Chief William P. Miles of the Pamunkey Tribe asking for information on the proposed Totopotomoy wastewater treatment plant and expressing concern that there had been no public hearings or environmental impact study on the project. The Norfolk District responded on 18 September 2000, describing the project components and their minimal environment impacts and advising Chief Miles that the Corps had previously authorized the project under Nationwide Permits 7, 12 and 26. Chief Miles was informed that Nationwide Permits are a class of General Permits developed by the Corps of Engineers for projects that have been determined to result in minimal impacts on the aquatic environment. For all such General Permits, the assessment of environmental impacts and the opportunity for public comment had been completed when the Nationwide Permits themselves were developed by Corps Headquarters.

The Virginia Council on Indians wrote on 18 January 2001 expressing their opposition to Hanover County's proposed Totopotomoy wastewater treatment plant and Pamunkey River discharge. The letter stated: "Based on the information that has been presented to the Virginia Council on Indians, we do not believe the Pamunkey River can sustain the impact of the project and Hanover County may have overstated its need for this wastewater treatment plant." The Virginia Council on Indians stated that as the "original caretakers of the land" they consider it necessary for them to comment on "…any project that might have possible adverse affects on the environment and the surrounding communities."

In a letter dated 22 January 2002, Chief William P. Miles of the Pamunkey Tribe again commented on the project. He stated the importance of the American shad as sustenance

and income for his people and described the Tribe's hatchery operation and efforts to increase shad populations. He stated his belief that "...the proposed discharge of wastewater into the Pamunkey River will only have a detrimental effect on Pamunkey River shad populations and our shad hatchery operations." He cited the significant reduction of Pamunkey River flows associated with recent Virginia General Assembly legislation as resulting in a reduced ability of the river to absorb wastewater discharges during periods of drought. He said that the aboriginal rights of the tribe to maintain their culture should be considered in any action affecting the Pamunkey River.

The Pamunkey Tribe operates a shad hatchery on the Pamunkey River approximately 20 river miles downstream of the proposed discharge outfall location. The Tribe has worked for many years in cooperation with the Chesapeake Bay Program, VDGIF and VMRC to provide shad from their hatchery for the State's bay-wide shad restoration effort. It is highly unlikely that State agencies would authorize any action that would adversely affect the State's own shad restoration program. In fact, during their permit review for the discharge outfall, VMRC deferred their decision to allow further consultation and evaluation of any water quality impacts that the project might have on fishery resources.

The VIMS review concluded that the proposed daily flows and effluent limits for the treatment plant would have a low probability of adversely affecting anadromous fish resources in the Pamunkey River. In their evaluation of VPDES VA0089915 permit for Hanover County, DEQ concluded that with the approximately 4:1 dilution available for the effluent, "...it is unlikely that the permitted limits will result in elevating the cBOD5 concentration in the river by more than about 2 mg/l beyond that naturally occurring." DEQ

stated their belief that "...the stream will be able to assimilate the additional concentration without any significant lowering of the existing quality." The usual dissolved oxygen level of 5.0 mg/l has been increased to 6.5 mg/l for the Totopotomoy wastewater treatment plant effluent outfall in order to ensure the protection of fish and wildlife resources. DEQ determined that the discharge would not decrease dissolved oxygen in the Pamunkey River and would not affect anadromous fish habitat or spawning. Furthermore, ultraviolet light will be employed instead of chlorine for effluent disinfection to avoid a chemical barrier to fish migration; restoration of pre-construction contours is required to eliminate any physical barriers to movement of fish; and time of year restrictions for in-stream construction work are required by the VMRC permit to protect anadromous fish spawning habitat. Any Corps permit issued on this project will also include as a special condition a time of year restriction prohibiting construction of the outfall structure from 15 February through 30 June of any year.

In issuing VPDES permit VA0052451 for the Virginia Power-North Anna Nuclear Power Station, DEQ included a Lake Level Contingency Plan "...to allow specific reductions in the lake discharge flow when the lake water level drops below designated levels due to drought conditions, taking into account and minimizing any adverse effects of any release reduction requirement on downstream users." This requires that the Pamunkey Indian Tribal Government, and other downstream users, be given at least 72 hours notice by Virginia Power prior to the initiation of flow reductions. If an adverse effect is found from the flow reductions, the flow will be increased in 5 cfs increments until the flow reaches 40 cfs or until the adverse effect has been eliminated.

Therefore, the District Engineer has determined that potential

adverse effects to anadromous fish have been considered and addressed in both the State and federal reviews of this project. All necessary requirements and conditions have been incorporated in order to protect fish and wildlife resources. The issuance of a permit for this project should not adversely affect the Pamunkey Indian Tribe's ability to operate their shad hatchery or to maintain their culture.

b. Residents of Hanover County: If constructed, the project would potentially provide a small number of permanent jobs for local residents as well as temporary employment opportunities during the construction phase. Construction activities should generate revenue for local contractors and building supply companies. Construction of the project as a public works effort will come at a cost to the local taxpayers. Hanover County has indicated that between 50 to 75 construction workers (contractor employees and subcontractors) have been laid off as a result of the court-ordered shut down of their originally permitted construction. The County estimates that the cost of about $200,000 per month associated with the shut down will be passed on to utility customers of Hanover County. While the costs to the applicant (and the taxpayers) of not proceeding with the work are real, these costs and the fact that some of the work has already begun did not prejudice the District Engineer's evaluation of the project.

The economic impact of certain categories of activities with minimal individual and cumulative adverse effects on the environment was addressed when the Nationwide Permits were developed by Corps Headquarters. Therefore, such public interest factors as economic impact are not normally considered in the review of a project that meets the terms and conditions of Nationwide Permits.

11. Cumulative Impacts:

a. Past Projects: From a review of the Norfolk District's permits database of permits issued for projects in the Pamunkey River, Totopotomoy Creek and Beaverdam Creek in Hanover County over the past five years, it appears that a total of 8.88 acres of wetland impacts were permitted in this region. Mitigation required for these impacts was 6.09 acres, resulting in a net loss of 2.79 acres of wetlands. This net loss of wetlands resulted largely from projects that qualified for authorization under categories of Nationwide Permits for which compensation is not required. The cumulative impacts of these past project have been determined to be minimal.

b. Current Projects:

(1) Belle Creek Development: The Belle Creek development on Academy Creek (pending application 01-V2172 submitted by The Hanover Group in December 2001) is a multi-use development that would utilize a portion of the Totopotomoy interceptor alignment. The developer anticipates having houses constructed and occupied by the fall of 2002.

The sewer line serving the Bell Creek development would consist of approximately 9,700 linear feet of pipeline from the development to the existing Shelton Point pump station that currently pumps to a trunk sewer and then to Henrico County for treatment. However, sewage from the Bell Creek development will eventually be pumped to Hanover County's proposed Totopotomoy wastewater treatment plant, if it is approved and constructed. An estimated 7,500 feet of 12 to 24-inch sewer line would be constructed along Academy Creek and approximately 2,200 feet of 30-inch

sewer line would be constructed along the same or nearly the same alignment that the Totopotomoy interceptor would have followed. The current application proposes a permanent loss of 2.09 acres of wetlands and temporary impacts to 3.37 acres of wetlands. The Hanover Group proposes to contribute to the Virginia Wetlands Restoration Trust Fund on a 1 to 1 basis and to preserve 23.8 acres of uplands, wetlands and waters of the U. S. as compensatory mitigation for the permanent wetland impacts. The review of this project and its impacts has not yet been completed.

While this portion of the Bell Creek sewer line is proposed to occupy the original sewer easement obtained by Hanover County for the Totopotomoy interceptor, the Bell Creek sewer line will be a 30-inch line capable of carrying approximately 4.8 mgd of flow. The Totopotomoy interceptor would have been a 42- inch line with a flow capacity of 12 mgd. The Bell Creek sewer line is sized to serve the Hanover Group's development and would not serve the same function as the originally proposed Totopotomoy interceptor.

In a letter dated 1 February 2002, the Hanover County Department of Public Utilities stated that the proffers to the County for the Bell Creek development project provide that if the County does not build the Totopotomoy interceptor, the developer would build a sewer from Academy Creek to the Shelton Pointe pump station. The County's standard practice is to pay for part of the construction in accordance with their November 2000 development agreement and the County's oversizing policy. Hanover County has stated that they have no plans to construct any portion of the Totopotomoy interceptor and are not aware of any other current project that would require the construction of any portion of it.

(2) Beaverdam Creek Forcemain: The Beaverdam Creek Forcemain (pending application 00- V0106 submitted by Hanover County) is a proposed 3.3-mile sanitary sewer forcemain extending from the existing Beaverdam Creek pump station in Hanover County to the existing Strawberry Hill pump station in Henrico County. The force main would be installed by trenching and backfilling except for the Chickahominy River crossing which would be accomplished by directional drilling. The currently submitted application indicates that 12.2 acre of wetlands adjacent to the Chickahominy River would be impacted by conversion and temporary access impacts. The application is currently inactive while Hanover County works on a redesign to reduce the wetland impacts and effects on historic resources. This section of forcemain would be needed with or without the County's proposed Totopotomoy wastewater treatment plant. However, if the wastewater treatment plant comes on line first, construction of the new forcemain would be postponed.

Although the actual net loss or gain in wetlands is unknown at this time, it is anticipated that through avoidance, minimization and mitigation, the cumulative impacts of these currently proposed activities should be minimal.

c. Reasonably Foreseeable Projects:

(1) Totopotomoy Interceptor: The Totopotomoy interceptor extension was originally proposed to provide initial flow to the Totopotomoy wastewater treatment plant from the existing pump station No. 5 to offload wastewater being sent to Henrico County and to provide enough flow to economically operate the wastewater treatment plant. The Lee Davis pump station will serve a portion of the Beaverdam Creek basin rather than the Totopotomoy Creek

basin that would have been served by the Totopotomoy interceptor. However, the Lee Davis pump station will provide initial wastewater flow to the treatment plant in quantities nearly comparable to the Totopotomoy interceptor. The reduction in the flow being sent to Henrico County by the construction of the Lee Davis force main will allow for the continued transfer to Henrico County of sewage flow collected in the Totopotomoy Creek basin. The Lee Davis pump station will therefore allow Hanover County to remain within its contractual limits of 5.4 mgd of treatment capacity with Henrico County for an additional 7 to 10 years with the anticipated 3 to 4% growth. Hanover County has stated that when warranted by development, additional flow from the existing Shelton Pointe pump station would be diverted via the proposed 16-inch pipe from Henrico County to the proposed treatment plant through the proposed Lee Davis Pump station. Later, when warranted, the replacement of the proposed 16-inch pipe with a 20 to 24-inch pipe would provide additional capacity for the Totopotomoy service area well beyond the anticipated 10-year period. This alternative would eliminate the need for the originally proposed Totopotomoy interceptor.

Hanover County formally withdrew their permit application for DOA permit 00-V1332 for the Totopotomoy interceptor on 16 November 2001. The County also withdrew their permit application for the Totopotomoy interceptor from the Virginia Department of Environmental Quality on November 19, 2001. On November 28, 2001, the Board of Supervisors removed the Totopotomoy interceptor from the County's Capital Improvement Plan (CIP) and replaced it with the Lee Davis Road pump station and forcemain. Therefore, the Totopotomoy interceptor no longer exists as a County funded project. Although the County does not claim that some portion of the interceptor will never be built in the future,

they have stated that they have no intention of constructing the Totopotomoy interceptor as it was presented to the Corps. The County's recent and more detailed evaluation does not justify spending $7 million for a new interceptor when much less expensive options are available to satisfy the County's needs for the next 7 to 10 years and which can be phased in as needed. Therefore, the District Engineer has concluded that the Totopotomoy interceptor in its entirety is not a reasonably foreseeable future impact.

(2) Comprehensive Plan: Hanover County's 1 February 2002 letter from the Department of Public Utilities Director stated: "As we have represented to the Corps of Engineers since the initial preapplication meeting for our previous projects in July 1999, a sewer may never be required between Rural Point Road and the WWTP along Totopotomoy Creek, an area outside of the Suburban Service Area. Sewage can be pumped from the Shelton Pointe Pump Station or another station to either Henrico County or to the new WWTP, if it is permitted and constructed. The County is currently in the process of updating the Comprehensive Plan and a series of public meetings were conducted just this week. As part of this update process, I will be recommending that the section of the sewer line shown in the Comprehensive Plan outside of the Suburban Service Area along Totopotomoy Creek be eliminated. Please note that a change to Comprehensive Plan involves multiple public hearings, review by the Planning Commission, and then a recommendation by the Planning Commission is provided to the Board of Supervisors for action. In terms of the CIP, I will be recommending improvements to facilities in the Lower Totopotomoy Creek Basin within the Suburban Service Area on an as needed basis and in response to the actual development that occurs. This is just as I would do in any other part of the Suburban Service Area." Based on the

County's intention to eliminate the section of sewer line outside of the Suburban Service Area along Totopotomoy Creek between Rural Point Road and the Totopotomoy treatment plant from their Comprehensive Plan, the District Engineer has determined that this section of sewer line is not a reasonably foreseeable project.

(3) Easements Outside the Suburban Service Area: While many of the easements required for the Totopotomoy interceptor have been purchased, a continuous corridor has not been obtained and the County is not making any further efforts to obtain additional easements outside of the Suburban Service Area. No easements were condemned for the Totopotomoy interceptor and the County's plans to begin condemnation proceedings for the outstanding easements were halted when the decision was made to cancel the project. The Hanover County Department of Public Utilities Director stated in a letter dated 1 February 2002 that, "I see no reason for the County to keep the easements it obtained between Rural Point Road and the WWTP. It is not possible for the County to demand that property owners return the funds that they were paid in return for having these easements vacated. I also do not believe it is appropriate for the County to vacate these easements without the return of the funds paid. At this time, I will represent to the Corps of Engineers that if any owner of property located outside of the Suburban Service Area were to agree to return the funds that they were paid for an easement that I would recommend to the Board of Supervisors that the easement be vacated. Vacating easements requires both a public hearing and approval by the Board of Supervisors. I obviously cannot promise that the easements would be vacated at this time but it would be my recommendation to do so under the conditions outlined above."

The District Engineer has determined that the County's willingness to vacate the easements they have obtained outside of the Suburban Service Area is further evidence that the section of sewer line between Rural Point Road and the Totopotomoy treatment plant will be eliminated from their Comprehensive Plan.

(4) Influent Pump Station: In that same letter, the Director further stated: "…the influent pump station (IPS) was included in the County's application because of the unusual situation we found ourselves in. We were far into construction on the WWTP project, discharge force main and discharge diffuser when work was stopped. All wetlands that were to be taken at the WWTP site had been physically taken and no longer existed. Work on the IPS began early in the project and this facility was partially constructed when construction was halted by Court order. The IPS served multiple functions including pumping wastewater from the Totopotomoy Creek Interceptor up to the WWTP; collecting and pumping plant process water; and collecting, grinding and pumping septage delivered to the WWTP by septage hauling contractors. The Lee Davis Road Wastewater Pump Station and Force Main, which replaces the Totopotomoy Creek Interceptor, could discharge to either the IPS or directly to the WWTP screening facilities and each discharge point has its advantages and disadvantages. At this point it appears it will be more cost effective to have the Lee Davis Road facilities discharge directly to the WWTP screening facilities therefore the IPS is no longer needed to pump wastewater to the WWTP. This means the IPS would only be used to handle the plant process water and septage processing functions which means that facility, as originally designed, would be under utilized. As Mr. Herzog informed you, the County was having an analysis performed to determine whether it made more sense to abandon the IPS

and construct a new, smaller station or to complete the IPS and let it serve this more limited function. The County has completed its analysis and has decided to halt any additional IPS construction and we are proposing to abandon it. As is standard practice within the County, we will remove all improvements to 4 feet below the ground surface and fill the IPS with soil material, grade and seed."

Based on the County's plans to abandon the influent pump station, the District Engineer has determined that the influent pump station is no longer a component of the currently proposed Totopotomoy wastewater treatment plant. A special condition requiring the removal of any existing structures associated with the influent pump station to 4 feet below the ground surface will be included in any Corps authorization for this project.

(5) Other Options to Handle Sewage in the Future: The County presently anticipates much less development (with less demand for sewer service) along the originally proposed Totopotomoy interceptor route than was expected when it was originally included in the Comprehensive Plan. Large tracts of land have been designated as historic preservation districts (Totomoi Historic District and Rural Plains Historic District), and the County's hopes to attract a chip plant to locate within the County did not materialize. Hanover County has outlined a number of future options for handling sewage within the County that do not involve the construction of the Totopotomoy interceptor. The County anticipates that the existing Avondale Pump Station, Berkeley Forest Pump Station, Royal Glen Pump Station and Pump Station No. 5, (all of which currently send flow to Henrico County and are expected to continue to do so for the next 7 to 10 years) would continue to serve their respective areas of the County.

Upgrades of the Avondale and Number 5 pump stations to allow for additional flow, if needed, would involve larger pumps and possibly a new force main along Route 301 in the existing easement. The County also indicated that a new pump station and forcemain for the Powhite Creek basin is proposed to come on line around 2007 to serve the Powhite Creek area. Sewage from this area would initially be pumped to Henrico County. By 2014, Hanover County expects to again be reaching their contractual capacity of 5.4 mgd with Henrico County and plans to construct a larger pump station so that sewage could be pumped to the new Totopotomoy wastewater treatment plant (if permitted.) The exact location of the Powhite Creek pump station and forcemain have not been identified, therefore, the extent to which the project would be within the Corps' jurisdiction cannot be determined at this time. However, pumping rather than relying on gravity flow to transport sewage should reduce the impacts on wetlands and waters of the U. S.

The County anticipates that the initial 5 mgd capacity of the Totopotomoy wastewater treatment plant will handle sewage flows until about 2012. The first expansion of the Totopotomoy treatment plant's capacity to 10 mgd would handle flows until 2027. Impacts beyond 2027 are not reasonably foreseeable, however, Hanover County's long range planning indicates that expansion to a 20-mgd capacity would accommodate the County's needs through 2047. The need for the entire designed 30-mgd capacity would occur at buildout of the Suburban Service Area, which is expected around 2060. The footprint of the treatment plant has been aligned so that none of the future expansions would involve wetland impacts.

The District Engineer has determined that Hanover County has fully disclosed all of the activities that are reasonably

related to the project presently before the Corps. Based on Hanover County's plans to abandon the influent pump station, to eliminate the section of the sewer line shown in the Comprehensive Plan outside of the Suburban Service Area along Totopotomoy Creek, and to voluntarily vacate the easements the County has obtained between Rural Point Road and the Totopotomoy wastewater treatment plant, if requested, the County has demonstrated to the satisfaction of the District Engineer that they have no plans to construct the Totopotomoy interceptor in the reasonably foreseeable future. Furthermore, the County has identified a number of feasible future alternatives for handling sewage within the County in lieu of constructing the Totopotomoy interceptor. Future pump station construction, treatment plant and pump station upgrades and the currently proposed construction of a sewer line by others along a portion of the originally proposed Totopotomoy interceptor alignment would be considered as cumulative impacts of the project that would occur within 7 to 10 years. However, the project that is currently before the Corps has been determined to have independent utility from these other projects and is therefore treated as a single and complete project. The County has clearly demonstrated through its actions that the Totopotomoy interceptor is neither a necessary adjunct to the wastewater treatment plant, nor is it any longer the County's preferred alternative.

Some of the future activities in the vicinity of this project are likely to result in wetland impacts, although the specific acreages of impact cannot presently be defined. However, it is anticipated that through avoidance, minimization and mitigation, the cumulative impacts of these reasonably foreseeable future activities should be minimal. Because the wetland impacts of this project will be more than offset by compensatory mitigation, the proposed outfall structure, Lee

Davis pump station and the Totopotomoy wastewater treatment plant will not contribute cumulatively to the loss of wetlands. The District Engineer has also determined that the cumulative wetland impacts of this project, when taken into consideration with past, current, and reasonably foreseeable future activities, should likewise be minimal.

12. Coordination with State and Federal Resource Agencies: The various components of the project were coordinated with applicable State and federal resource agencies as a joint site visit candidate for preapplication 99-R0875 for the Totopotomoy interceptor, Totopotomoy wastewater treatment plant, five wetland crossings of the forcemain, and the outfall structure on the Pamunkey River; and permit application 99-V1877 for the Totopotomoy wastewater treatment plant, three wetland crossings of the forcemain, and the outfall structure on the Pamunkey River; and by two separate public notices for permit applications 00- V1332 for the proposed Totopotomoy interceptor alone and 01-V2032 for the currently proposed wastewater treatment plant, the outfall structure on the Pamunkey River and the Lee Davis pump station.

In order to fully evaluate certain public interest factors, official correspondence and reports were reviewed from the prior administrative record for the above listed previous actions. Also, the applicant forwarded to the Norfolk District copies of other previous official agency correspondence which they had received but had not submitted for the prior administrative record. Most, but not all, applicable state and federal agencies submitted separate comment letters on application 01-V2032. Correspondence from the following agencies were reviewed and considered in the evaluation of permit application 01-V2032.

a. Virginia Department of Environmental Quality (DEQ):

(1) Virginia Water Protection Permit (VWPP): In a letter dated 9 November 1999 concerning application 99-1877 to construct the forcemain and discharge outfall in the Pamunkey River, DEQ advised Hanover County that the water quality impacts of the proposed project should be minimal and temporary in nature and determined that a Virginia Water Protection Permit/401 Water Quality Certification (VWPP) would not be required provided the County received and complied with a Corps of Engineers Regional or Nationwide Permit for which DEQ has waived or issued certification.

In a letter dated 28 December, 2001, DEQ advised Hanover County's environmental consultant that project 01-2032 qualified for authorization under the Virginia Water Protection General Permit WP2, pending submission of the permit application fee.

In a telephone conversation with the District on 29 January 2002, DEQ indicated that they had drafted a general permit for this project (WP2 for utility projects) which they intended to issue by 26 February 2002. Their decision to issue a general permit was based on the fact that the impacts are minimal and that the VPDES and VMRC permits have been issued. DEQ indicated that they did not intend to provide comments on the Public Notice for 01-V2032.

On 20 February 2002, DEQ issued their VWP General Permit for this project stating that the activity "....if conducted in accordance with the conditions set forth herein, will protect instream beneficial uses and will not violate applicable water quality standards. The board finds that the

effect of the impact, together with other existing or proposed impacts to wetlands, will not cause or contribute to significant impairment of state waters or fish and wildlife resources."

(2) Virginia Pollutant Discharge Elimination System Permit (VPDES): VPDES permit (VA0089915) was issued on 28 April 1999 by the State Water Control Board for both 5 mgd and 10 mgd discharge from the treatment plant. The VPDES permit specifies effluent limitations; requires water quality monitoring of the effluent itself for cBOD5, suspended solids, TKN, total phosphorous, total nitrogen, fecal coliform, pH and dissolved oxygen; and requires biological toxicity monitoring of the effluent. The VPDES permit also requires annual in-stream quantitative monitoring of benthic macroinvertebrates in the Pamunkey River.

In a letter dated 21 June 2000, DEQ advised Hanover County that their plans and specifications for the Totopotomoy wastewater treatment plant had been conditionally approved by DEQ and that the Virginia Department of Health had recommended conditional approval by letter dated 3 April 2000. In a letter dated 18 January 2001, the Water Permits Manager of the DEQ Piedmont Regional Office advised Hanover County that the Director of the Department of Environmental Quality had approved the plans for the Totopotomoy wastewater treatment plant, outfall forcemain and discharge structure and that the letter constitutes their Certificate to Construct.

On 29 January 2002, the Corps's project manager spoke with the DEQ Piedmont Regional Office Director to discuss the VPDES permit and comments on Corps' Public Notice 01-V2032. DEQ stated that they had issued the VPDES

permit as they had determined that the project would not be a threat to water quality, and that DEQ did not intend to comment on the Corps' Public Notice. DEQ stated that the portion of the Pamunkey River at the discharge outfall was un-modelable because of tidal influence and that in such cases, DEQ policy requires the most stringent effluent limits that are self-sustaining.

DEQ informed the District that problems with dissolved oxygen in portions of the Pamunkey River are most likely due to naturally occurring inflow from swamps that drain into the river. They indicated that the VPDES permit review included consideration of the maximum discharge, but that discharge volume does not matter since the 10-10-3 limits set for tertiary treatment performance must be met. (The Health Department approves the technology to achieve the performance.) The VPDES permit requires water quality monitoring and monthly reporting of the discharge at the end of the pipe. If the standards are not met, enforcement action is taken. The Piedmont DEQ Office indicated that it is not routine for DEQ to require downstream water quality monitoring. DEQ requires water quality monitoring of the discharge rather than the river itself since they would not be sure whether the discharge, naturally occurring conditions, or other anthropogenic disturbances were responsible for individual dips in dissolved oxygen in the river, whereas they are able to monitor and enforce what comes out of the discharge pipe. The VPDES permit does include river monitoring of macroinvertebrates near the effluent.

DEQ stated that the issue of a 20 cfs release versus a 40 cfs release from Lake Anna would not change their determination. Water quality monitoring is required at a gage at the Route 30 Bridge, and if a problem is found there, the State can require the release to be increased. DEQ's

evaluation of the impacts to fish and wildlife resources is based on State-wide water quality standards set by the State with input from all State agencies. DEQ determined that the discharge would not decrease dissolved oxygen in the Pamunkey River and would not affect anadromous fish habitat or spawning, and with the conditions imposed, would not be in violation of the State's water quality standards. DEQ stated that although the VPDES permit has been challenged in court, the challenges have not been successful and the permit is still valid.

DEQ indicated that at the time the VPDES permit was issued, they were not aware that flows from Lake Anna would be reduced by 50 percent during times of drought. However, DEQ stated that the reduced flows would not make any difference to water quality since DEQ considers the 10-10-3 water quality restriction (10 mg/l cBOD, 10 mg/l TSS. 3 mg/l TKN) to be self-sustaining. The limits allowed under 10- 10-3 protect water quality regardless of river flow and do not interfere with the capacity of the waterbody to assimilate and process pollutants. DEQ further stated that regardless of the effluent discharge rate, the 10- 10-3 restriction would maintain State-established water quality standards.

b. Virginia Marine Resources Commission (VMRC): Permit 99-1877 (same as Corps permit application 99-V1877) to install a treated wastewater diffuser structure in the Pamunkey River was issued by the Virginia Marine Resources Commission on 18 December 2000. Special conditions of the permit included: 1) all areas of state-owned bottom and adjacent lands disturbed by the construction be restored to their original contours and natural conditions within 30 days for the date of completion of the work, 2) all excess materials shall be removed to an upland site and

contained to prevent reentry into state waters, and 3) no work shall occur involving state-owned submerged lands during the period 15 March through 30 June in order to protect anadromous spawning species.

On 30 January 2002, the Corps project manager spoke to VMRC regarding their lack of comments on Public Notice 01-V2032 for this project. VMRC indicated that they had written a letter to Hanover County on 11 December 2001 with a copy to the Corps. As the Corps had not yet received a copy, VMRC agreed to send it by FAX . VMRC indicated that they had approved the discharge diffuser structure and no additional action was required on that portion of the project. VMRC stated that the remainder of the project did not fall within areas in VMRC's jurisdiction and would not require authorization from them. VMRC's 11 December 2001 letter commenting on permit application 01-2032 for the Totopotomoy wastewater treatment plant, forcemain, discharge diffuser, and the Lee Davis Road pump station stated that the discharge diffuser portion of the project was approved by the Commission under permit 99-1877 on 24 October 2000 (permit issued on 18 December 2000) and that no additional action is required from VMRC. The letter stated that the remaining impacts are in areas over which VMRC is not currently exerting jurisdiction, therefore, no additional authorization from VMRC is required.

c. Virginia Department of Historic Resources (VDHR): In a letter dated 7 June 2000, the Virginia Department of Historic Resources (VDHR) concurred with the Corps' finding of no adverse effect for project number 99-V1877 for the Totopotomoy wastewater treatment plant, forcemain and outfall discharge structure (VDHR File No, 98-0066).

In a letter dated 31 January 2002, VDHR indicated that their initial finding of no adverse effect, conditioned on coordination of any design changes, is still valid for the sewer line, Totopotomoy wastewater treatment plant and outfall, and is also valid for the Lee Davis pump station. VDHR added a condition to the no adverse effect as follows: "The Corps will coordinate with the DHR regarding the potential development of a multi-project wetlands mitigation site at the wastewater treatment plant site." VDHR advised that since burials have been encountered elsewhere in the project area and the possibility of additional burials also exists within the present project boundaries, their office should be notified immediately if human remains are discovered during project implementation.

d. Virginia Department of Health: In a letter dated 4 April 2000, the Virginia Department of Health (VDH) commented to DEQ concerning Hanover County's plans for the Totopotomoy wastewater treatment plant. The letter advised that the plans and specifications are technically adequate and are recommended for approval by the Health Department with four conditions that must be met before a Certificate to Operate is issued (submission and approval of an Operations and Maintenance Manual, Sludge Management Plan, design for process Instrumentation, and design and construction of one or more treatment units to meet permit limits if the treatment plant fails to meet the permit effluent limits).

In a letter dated 5 December 2000, VDH advised DEQ that Hanover County's plans for the wastewater treatment plant, outfall forcemain and discharge structure are technically adequate and are recommended for approval by VDH. VDH advised that issuance of a construction permit is a matter for DEQ's office.

In a telephone conversation with the District on 31 January 2002, VDH indicated that they had not seen the Public Notice advertising permit application 01-V2032, but remembered the original application for the Totopotomoy wastewater treatment plant and outfall. VDH stated that from the Health Department's point of view, the treatment plant is "where it ought to be" and that it was a good project. VDH stated that the discharge location is "where it has to be" and that the water from the discharge pipe would actually be cleaner than the water in the Pamunkey River. VDH stated that they could foresee no water quality problems associated with this discharge.

In a letter dated 27 February 2002, the VDH indicated that their comments are limited to the impact on public health of (1) downstream drinking water intakes, (2) shellfish sanitation, and (3) recreational uses. VDH coordinated the project with their Division of Drinking Water, Division of Shellfish Sanitation and local Health District and reported that "None has objections to the sufficiency of the documents nor to issuance of the permit. VDH indicated that they had reviewed and recommended to DEQ approval of the treatment work design and transport facilities as they are "...technically adequate to achieve the stream standards established by DEQ for protection of the Pamunkey River."

e. Virginia Department of Game and Inland Fisheries: In a letter to DEQ dated 4 February 1999, the Virginia Department of Game and Inland Fisheries (VDGIF) indicated that since spawning and nursery areas of anadromous fishes such as striped bass, river herring and American shad have been documented at the project site, they supported dissolved oxygen monitoring to prevent adverse impacts to these species. Also, because chlorine can act as a chemical barrier to anadromous fish migrations,

VDGIF indicated that they supported Hanover County's use of ultraviolet disinfection to reduce impacts to aquatic biota. VDGIF did not comment on the Public Notice for the present application.

f. Virginia Institute of Marine Science (VIMS): VIMS' 16 August 2000 comment report on application 99-1877 recommended that construction be avoided form mid-March through June to minimize adverse impacts on anadromous fish; and that the river bank and bottom contours be returned to preconstruction condition and the bank stabilized to minimize adverse impacts to non-vegetated wetlands, subaqueous bottom and local water quality from bank erosion. These recommendations were included as special conditions of VMRC permit 99-1877. VIMS did not provide separate comments to the Corps on Public Notice 01-V2032. However, these VIMS recommendations and similar previous recommendations made by the NMFS would be included as special conditions of any Corps authorization under 01-V2032.

In a letter to VMRC dated 11 October 2000, VIMS commented on the potential for adverse impacts to anadromous fish in the Pamunkey River downstream of the proposed discharge and concluded, "Through our review of the environmental situation surrounding this project, which took into account the permitted effluent limits and discharges, we determined that the probability of occurrence of a DO sag event sufficient to adversely impact anadromous fish is low." VIMS noted that their analysis did not consider cumulative impacts from development which generally follows sewage treatment upgrade and expansion projects. However, they concluded, " Our extended analysis has confirmed that the daily flows and effluent limits proposed for this treatment plant have a low probability of adversely

affecting anadromous fish resources in the Pamunkey River. Future growth and growth patterns may change this conclusion but are beyond the scope of the present analysis."

g. Virginia Department of Conservation and Recreation (DCR): In a memo dated 26 June 2000 commenting on application 99-1877, DCR commented that appropriate habitat for the dwarf wedge mussel does not occur at the project site. In addition, DCR stated "...the proposed project is not anticipated to have any adverse impact on existing or planned recreational facilities, nor will it impact any streams on the National Park Service Nationwide Inventory, Final List of Rivers, potential Scenic Rivers or existing or potential State Scenic Byways."

In a 15 January 2002 letter commenting on application 01-V2032, DCR's Division of Natural Heritage commented that the potential for appropriate habitat for the federally listed threatened small whorled pogonia (Isotria medeoloides) (also a state-protected plant) exists at the site. DCR recommended that the project site be surveyed for the species. The results of the survey are contained in the Threatened and Endangered Species discussion in Section 7 above.

h. U. S. Environmental Protection Agency (EPA): In a letter dated 29 March 1999, EPA wrote to the Virginia Department of Environmental Quality that they had reviewed draft VPDES permit VA0089915 from the Piedmont Regional Office for the Totopotomoy wastewater treatment plant and had "no objection to the issuance of the permit". However, they did have concern for DEQ's consideration of the FWS's recommendation that a second freshwater mussel survey be conducted prior to issuance of the permit to ensure compliance with the Endangered Species Act (see

Threatened and Endangered Species discussion above).

In a telephone conversation on 11 December 2001, EPA informed the District that they did not plan to comment on the project at all since the wetland impacts were so minor. However, because of the water quality concerns, EPA was requested to provide written comments addressing whether the impaired status of the Pamunkey River or the modified Lake Anna release schedule would affect their concurrence with DEQ's issuance of VPDES permit VA0089915. In a later telephone conversation with the District on 30 January 2002, EPA indicated that they would have no comments on the wetland impacts of the project since they were so minimal, but did intend to comment on the water quality issues.

In a letter dated 4 February 2002, the Acting Director of the Office of Environmental Programs of EPA Region III stated "EPA has considered the impacts to wetland associated with this project, and has concluded that these impacts will be minimal, and acceptable, provided that the compensatory mitigation proposed by the applicant is fully and effectively implemented."

EPA further stated that subsequent to the 28 April 1999 issuance of the DEQ's permit VA0089915 (VPDES permit), EPA identified the Pamunkey River as a water impaired by fecal coliform; and the Virginia State Water Control Board notified the public in October of 2000 that the release of water by the Virginia Power North Anna Nuclear Power Station from Lake Anna may be decreased by up to half the previously authorized minimum (from 40 cfs to 20cfs) in times of drought. EPA noted the 25 January 2002 letter from the U. S. Fish and Wildlife Service that identified concerns regarding whether the construction and subsequent operation

of the project may adversely affect water quality in the Pamunkey River. EPA sated that "Most of these concerns appear to derive from events subsequent to the issuance of VPDES Permit No. VA0089915 for the facility." EPA suggested that the Corps, in connection with its review pursuant to 33CFR 320.4(d), work with EPA Region III's Office of Watersheds and the Commonwealth of Virginia to ensure that Virginia's analysis of water quality impacts pursuant to Section 401 of the Clean Water Act considers the issues raised by the FWS letter. (See Section I, below.)

i. U. S. Fish and Wildlife Service (FWS): In a letter dated 11 March 1999 to DEQ, the FWS stated that they could not concur with the findings of the first survey for the dwarf wedge mussel and requested that another survey be conducted in May or June in the same area. After reviewing the second survey, the FWS stated in a letter addressed to Hanover County's environmental consultants dated 8 September 1999 their opinion that appropriate habitat for the dwarf wedge mussel does not occur at the project site and found that the project is not likely to adversely affect the species.

In a letter dated 25 January 2002 responding to the Public Notice for application 01-V2032, the FWS maintained their earlier determination that the project was not likely to adversely affect the dwarf wedge mussel. They noted, however, that the project occurs within the range of the small whorled pogonia and recommended a survey within appropriate habitat at the project site. The FWS also expressed concern for the potential degradation of water quality and listed following four water quality issues that they believe should be addressed by the Corps in consultation with EPA:

- "Issuance of the VPDES permit to discharge to the Pamunkey River for this facility occurred shortly before the federal listing under Section 303(d) of the Clean Water Act of the Pamunkey River as an impaired water due to violations of the dissolved oxygen (DO) water quality standard. The Virginia DEQ has numerous years of data from the late 1980's through the 1990's that document instream dissolved oxygen violations. At the time of the VPDES permit issuance, the Virginia DEQ was aware that the EPA was in the process of listing the Pamunkey River as impaired for dissolved oxygen violations.

- The Virginia State Water Control Board provided Public Notice of October 10, 2000 that the release of water by the Virginia Power North Anna Nuclear Power Station from Lake Anna, which is a tributary to the Pamunkey River, shall be decreased up to half the previously authorized minimum (from a minimum release flow of 40 Cubic feet per second (cfs) to an authorized minimum of 20 cfs) in time of drought conditions. There are several newly permitted VPDES wastewater treatment facilities, including the above-referenced facility for which the modeling to determine the effect of both carbonaceous and nitrogenous biochemical oxygen demands have not been fully considered and accounted for given the decreased flows from North Anna Reservoir.

- The Pamunkey River is spawning and nursery habitat for numerous anadromous fish. Instream dissolved oxygen levels, which can be exacerbated during low flow conditions are critical to these species' reproduction success. A dissolved oxygen level of 5

milligrams per liter has been generally accepted as necessary to the survival of anadromous fish eggs, larvae and juveniles.

- The Virginia DEQ has agreed that before a 303(d) listed waterbody may be removed from the 303(d) list due to naturally occurring conditions, it must determine that there are no anthropogenic sources causing or contributing to the dissolved oxygen deficit. This process has not been completed for the Pamunkey River and actions to curb the anthropogenic sources of pollution that cause and contribute to dissolved oxygen deficits have not been implemented fully.

The FWS commented that "For projects which may adversely affect quality of the waters of the United State, the Corps' regulations state that 'Certification of compliance with applicable effluent limitations and water quality standards require under provisions of Section 401 of the Clean Water Act will be considered conclusive with respect to water quality considerations unless the Regional Administrator, Environmental Protection Agency (EPA), advises of other water quality aspects to be taken into consideration' (33CFR320.4(d)). Based on the information provided above, the Service recommends that the Corps require that the EPA reevaluate this project and its effects on the water quality of the Pamunkey River." The District Engineer's responses to the FWS's water quality concerns are contained in Section 8 above.

In a letter dated 20 February 2002, the FWS stated that after reviewing and discussing the small whorled pogonia survey report with its author, "... it is the opinion of the Service that appropriate habitat for this species does not occur a the

project site and therefore, this project is not likely to adversely affect the small whorled pogonia."

j. National Marine Fisheries Service (NMFS): In a letter dated 31 August 2000 commenting on application 00-V1332 for the Totopotomoy interceptor, the National Marine Fisheries Service (NMFS) indicated that anadromous fish have been collected in the proximity of the outfall site on the Pamunkey River and that the river is documented spawning and nursery habitat for alewife, striped bass, white perch, and yellow perch. The NMFS recommended that the permit be conditioned so that in-stream work is prohibited from 15 February through 30 June, that stream bottom contours be restored to their original elevation to prevent the creation of blockages, and that excavated material stored on site be stabilized and contained to prevent sedimentation during storm events. The NMFS did not provide separate comments on Public Notice 01-V2032. However, their above listed recommendations for in-stream work would be included as special conditions of any Corps authorization under 01-V2032.

13. **Public Participation and Opportunity for Comment:** Hanover County, DEQ, the SWCB, VMRC and the Corps of Engineers have provided considerable opportunity for public participation and comment on the various aspects of this proposal.

- Between March 1997 and February 2002, Hanover County held a series of public hearings and public information meetings on various aspects of the project.

- On 17 December 1998, the State Water Control Board and DEQ solicited public comments by

newspaper advertisement of the draft VPDES permit.

- On 19 January 1999, the State Water Control Board and DEQ conducted a public hearing on the draft VPDES Permit. The hearing was advertised in local newspapers.

- On 11 March 1999, the State Water Control Board held a meeting to consider Hanover County's VPDES permit application and to listen to comments from opponents to the issuance of the permit.

- On 29 August 2000, the Virginia Marine Resources Commission conducted a public hearing. VMRC advertised the permit application by public notice for written comments.

- On 16 October 2000, the Norfolk District published a Joint Public Notice for application 00-V1332 for the Totopotomoy Interceptor Sewer Project. The 30-day notice expired on 14 November 2000.

- On 11 December 2001, the Norfolk District published a Joint Public Notice for application 01- V2032 for the Lee Davis Road pump station and forcemain, the Totopotomoy wastewater treatment plant, a discharge forcemain, and discharge structure with a 30-day comment period to end on 11 January 2002. The District received several requests for a 2 week extension of the comment period since it coincided with the holiday season. The deadline for comments was extended to 25 January 2002.

In order to fully evaluate the public interest factors and the public opinion regarding the project, the Corps initiated the

review of application 01-V2032 as an individual permit and a Corps Public Notice was issued requesting public comment. However, based on the 14 December 2001 site inspection, the magnitude of impacts to wetlands and waters of the U. S. in this application appeared to be minimal and therefore potentially capable of being authorized by Nationwide general permits. Nevertheless, the comment period was maintained and all comments were reviewed and evaluated in order to determine whether the project met all of the terms and conditions of the Nationwide Permits. Many of the comment letters received requested that the Corps conduct a public hearing.

Corps' public hearings are one process by which the public is afforded an opportunity to present views, opinions and information which will be considered by the Corps in evaluating a proposed permit action. Generally, public hearings are held when the District Engineer determines that additional information is needed from the public in order to resolve substantive issues.

The Norfolk District has received and reviewed an estimated total of 1,600 comments in response to the Corps's Public Notice on this project. In accordance with 33 CFR 325.2(a)(3), the applicant was given an opportunity to review the comments and to furnish their views on substantive issues. In addition, the District conducted a meeting at the proposed Pamunkey River discharge site with the principal project opponents, Mrs. Frances Crutchfield and Mr. Henry Broaddus, and their attorneys and consultants in order to hear their concerns. Based on a review of these comments, and coordination with applicable State and federal resources agencies, it has been determined that the District has a full understanding of all of the substantive issues and concerns raised on this proposal. All issues which are within the

Corps' purview and within the scope of review appropriate to the level of impacts have been fully considered and addressed in this decision document. EPA's 404 (b)(1) Guidelines at 40 CFR 230.6 (b) state: "The Guidelines user, including the agency or agencies responsible for implementing the Guidelines, must recognize the different levels of effort that should be associated with varying degrees of impacts and require or prepare commensurate documentation. The level of documentation should reflect the significance and complexity of the discharge activity." Also, as outlined above, there have been numerous other opportunities for public input during the State's review of the project and the Corps has reviewed reports of the information provided during the State conducted public hearings. Therefore, the District Engineer has determined that no valid interest would be served by conducting a Corps' public hearing.

14. Summary of Public Comments: According to 33 CFR 325.3, "The public notice is the primary method of advising all interested parties of the proposed activity for which a permit is sought and of soliciting comments and information necessary to evaluate the probable impact on the public interest." An estimated total of 1,600 written comments were received from the public in response to Public Notice 01-V2032. The overwhelming majority of these letters expressed opposition to the project and were either form letters or letters following a suggested format found on a website called SaveOurRiver.org. Approximately 2 percent of the letters received were in favor of the project. However, the purpose behind soliciting public comment is not to conduct a vote, it is to gather information necessary to evaluate the probable impact on the public interest (see 33 CFR 325.3). All letters received from the general public have been reviewed and all comments were given full

consideration in the District Engineer's decision on this project. (A list of the names and addresses of all commenters is contained in the administrative record for this project.) Substantive comments are addressed below by subject. Other issues raised that are not pertinent to the District Engineer's decision have not been individually addressed.

a. The Corps should prepare an Environmental Impact Statement. In reviewing this project, the Corps of Engineers has complied with the requirements of the National Environmental Policy Act (NEPA) and its implementing regulations found at 40 CFR Parts 1500-1508 and 33 CFR Part 325 Appendix B. Environmental Impact Statements are prepared when the District Engineer determines that the decision is a major federal action significantly affecting the quality of the human environment. When the analysis results in a Finding of No Significant Impact (FONSI), an EIS is not necessary. The individual and cumulative adverse impacts of this project to the aquatic environment have been found to be minimal and to qualify for authorization under General Permits. Therefore, the District Engineer determined that an EIS is not warranted. Nationwide Permits are a class of General Permits developed by the Corps of Engineers for activities that have been determined to result in minimal individual and cumulative impacts to the aquatic environment. For all such General Permits, the assessment of environmental impacts and the opportunity for public comment was completed when the Nationwide Permits themselves were developed by Corps Headquarters.

b. The Corps should extend the public comment period and recognize commenters as interested parties. As stated in Section 13 above, the Norfolk District granted the two week extension of the comment period that was

requested by the principal opponents of the project as well as the FWS. Although the extended comment period officially ended on 25 January 2002, the Norfolk District has acknowledged, placed in the administrated record and considered all comments that have been received after the comment period closed. All comment letters from the general public were acknowledged by letter and the names (when legible) and addresses (when provided) of all commenters were compiled in a database in order to advise commenters of the District Engineers' final decision on this project.

c. The Corps should conduct a Public Hearing to allow for debate of environmental impacts, alternatives and costs. A Corps public hearing is not a forum for public debate, rather it is an information gathering session conducted when the District Engineer needs more information in order to gain a better understanding of the issues. Ample opportunity for public participation and comment has been provided on this project and approximately 1,600 written comments were received in response to the Public Notice. Through coordination of public concerns with the applicant and applicable State and federal agencies, the District Engineer has attempted to resolve the substantive issues informally and has determined that no additional information is needed to make a decision. As stated in Section 13 above, the District Engineer has a full understanding of all of the substantive issues and concerns raised on this proposal and has determined that a Corps' public hearing is not warranted.

d. The stated 105-day review period is inadequate for the Corps' required review. Projects similar in nature to Hanover County's proposal that would not result in more than minimal individual and cumulative adverse impacts to the aquatic environment would generally satisfy the terms

and conditions of Corps General Permits. Similar projects are normally reviewed within the 45-day pre-construction notification interval. Therefore, the District Engineer has determined that a 105-day review period is more than adequate to evaluate this project.

e. Hanover County has not submitted a complete permit application and has not included all activities reasonably related to this project and still plans to build the Totopotomoy interceptor or have it built by others. As stated in Section 4 above, the District Engineer has determined that Hanover County has fully disclosed all of the activities that are reasonably related to the project and has determined that the application before the Corps is for a single and complete project with independent utility from the previously proposed Totopotomoy interceptor as well as from any future improvements to the conveyance of wastewater within the County.

As stated in Section 11 b. above, Hanover County has formally withdrawn their permit application for the Totopotomoy interceptor, removed it from the County's Capital Improvement Plan and replaced it with the Lee Davis Road pump station and forcemain. Therefore, the Totopotomoy interceptor no longer exists as a County funded project. Although the County does not claim that some portion of the interceptor will never be built in the future, they have stated that they have no intention of constructing the Totopotomoy interceptor as it was presented to the Corps. Hanover County has identified a number of future options for handling sewage within the County that do not involve the construction of the Totopotomoy interceptor. Also, the proposed Lee Davis pump station will provide virtually the same initial flow to the wastewater treatment plant the Totopotomoy interceptor would have provided.

Based on the version of the project for which authorization is currently sought in this permit application, which includes ample justification for alternatives to the Totopotomoy interceptor that are not only less environmentally damaging than the Totopotomoy interceptor, but also less expensive, it is difficult to imagine how or why the Totopotomoy interceptor as originally proposed would again be proposed.

The County is currently in the process of updating their Comprehensive Plan and began conducting public meetings to eliminate the section of sewer line shown on the Comprehensive Plan along Totopotomoy Creek between Rural Point Road and the Totopotomoy wastewater treatment plant. The County recently stated that they are willing to vacate the easements for this section of the originally proposed alignment if property owners will return the funds they were paid for an easement. Also, the County recently advised the District of their plans to abandon the influent pump station. Therefore, the County has demonstrated to the satisfaction of the District Engineer that they have no plans to construct the Totopotomoy interceptor. Therefore, it is not a reasonably foreseeable cumulative impact of the project currently before the Corps.

While Hanover County has no current plans to construct any portion of the originally proposed 5.55-mile long (29,320 linear foot) Totopotomoy interceptor, The Hanover Group proposes to construct 2,200 feet (0.42 miles) of 30-inch sewer line along the same or nearly the same alignment that a portion of the Totopotomoy interceptor would have followed in order to provide sewer service to the Belle Creek multiuse development on Academy Creek. The Bell Creek sewer line will be a 30-inch line capable of carrying approximately 4.8 mgd of flow, whereas the Totopotomoy interceptor would have been a 42-inch line with a flow capacity of 12 mgd. The

Bell Creek sewer line is sized to serve the Hanover Group's development and would not serve the same function as the originally proposed Totopotomoy interceptor. Corps authorization for the Bell Creek sewer line and other activities in wetlands and waters of the U. S. is being evaluated under The Hanover Group's permit application 01-V2172.

f. The applicant has previously attempted to piecemeal this project. The basis for this comment seems to rely on the fact that two previous applications and a pre-application have been submitted to the Corps for these same activities. It is not unusual for an applicant to submit a pre-application plan for a Corps jurisdictional determination as was done for pre-application 99-R0875. The Norfolk District chose to assert discretionary authority over the Totopotomoy interceptor separately (00-V1332) because it would have resulted in more than minimal impacts to the aquatic environment and the District had determined that the outfall, forcemain and wastewater treatment plant had utility independent of the Totopotomoy interceptor. Nationwide Permit verifications were issued for the original application for the Totopotomoy wastewater treatment plant, forcemain and outfall on the Pamunkey River under permit 99-V1877.

The most recent application (01-V2032) was submitted for re-authorization of the wastewater treatment plant, and outfall after the Nationwide Permit verification had been invalidated by the court. In this application, the Lee Davis pump station replaced the originally proposed Totopotomoy interceptor. Therefore, the District Engineer does not agree with allegations that the submission of multiple applications in this case was an attempt to "piecemeal the project" or to "avoid regulatory scrutiny."

g. If Hanover County does not intend to construct the Totopotomoy interceptor, then the permit must be denied because the wastewater treatment plant and influent pump station do not have to be located in wetlands and will violate the Section 404 (b)(1) Guidelines. As stated in Section 11 b. (4) above, Hanover County has decided to halt any additional construction of the influent pump station and propose to abandon it. All improvements will be removed to four feet below the ground surface and the area will be filled, graded and seeded. On-site avoidance and minimization of wetland impacts at the Totopotomoy wastewater treatment plant site have been accomplished through site selection and footprint orientation, however, the consideration of off-site alternatives is not required for the evaluation of projects with minimal individual and cumulative impacts that would qualify for general permits.

EPA's 404 (b)(1) Guidelines at 40 CFR 230.6 (b) state: "The Guidelines user, including the agency or agencies responsible for implementing the Guidelines, must recognize the different levels of effort that should be associated with varying degrees of impacts and require or prepare commensurate documentation. The level of documentation should reflect the significance and complexity of the discharge activity." The preamble to the Corps' 1996 Nationwide Permits states, "Furthermore, the "sequencing" requirement for individual permits for off-site avoidance under the 404(b)(1) Guidelines does not apply to general permits."

h. Less damaging alternative locations for the outfall are available, therefore the location of the outfall and diffuser violates the Section 404(b)(1) Guidelines and must be denied. EPA's 404 (b)(1) Guidelines recognize that

the level of analysis required varies with the nature and complexity of impacts and state at 40 CFR 230.7 (b)(1) "…consideration of alternatives in Section 230.10 (a) are not directly applicable to General Permits." The Guidelines at 40 CFR 230.10 state "Although all requirements in Section 230.10 must be met, the compliance evaluation procedures will vary to reflect the seriousness of the potential for adverse impact on the aquatic ecosystems posed by specific dredged or fill material discharge activities. Also the preamble to the Corps' 1996 Nationwide Permit regulations (page 65911 Paragraph 4 states, "…the "sequencing" requirement for individual permits for off-site avoidance under the section 404(b)(1) Guidelines does not apply to general permits." The District Engineer has evaluated the alternatives analysis as is appropriate for the level of impact of the project.

i. The Corps should conduct an independent assessment of other alternatives to Hanover County's proposed project including regional cooperation with the City of Richmond and Henrico County, expansion of existing wastewater treatment plants, reduction of Hanover County's inflow and infiltration problems, creation of storage and land application, and discharge of treated sewage into the Chickahominy River. The District Engineer has evaluated the alternatives analysis as is appropriate for the level of impact of the project. Hanover County submitted with their permit application an analysis of the various off-site alternatives that they had considered to provide treatment, conveyance and disposal of wastewater, including reports on engineering, feasibility, wastewater treatment plant site selection, and outfall discharge location prepared by several consulting firms. This alternatives analysis was reviewed as a part of the District Engineer's evaluation of the project for on-site minimization of wetland

impacts.

On-site avoidance and minimization of wetland impacts was accomplished through selection of a site for the wastewater treatment plant where wetlands are located along the fringes of the property and could be largely avoided. Orienting the footprint in the central portion of the property also avoids potential future impacts to forested headwater wetlands on the eastern portion of the property if and when the wastewater treatment plant is expanded. Also, the County was able to further minimize wetland impacts at the Lee Davis pump station from 240 square feet to 30 square feet by replacing the originally proposed junction box with a smaller diversion structure and manhole.

EPA's 404 (b)(1) Guidelines at 40 CFR 230.7 (b)(1) state "…consideration of alternatives in Section 230.10 (a) are not directly applicable to General Permits." It is stated in 40 CFR 230.10 that "Although all requirements in Section 230.10 must be met, the compliance evaluation procedures will vary to reflect the seriousness of the potential for adverse impact on the aquatic ecosystems posed by specific dredged or fill material discharge activities." Also the preamble to the Corps' 1996 Nationwide Permit regulations (page 65911 Paragraph 4 states, "…the "sequencing" requirement for individual permits for off-site avoidance under the section 404(b)(1) Guidelines does not apply to general permits."

j. The discharge will damage water quality in the Pamunkey River because the river already fails to meet minimum water standards, there is not sufficient tidal action and there will not be enough continuous fresh water flow to prevent pollution. As outlined in Section 8 above, the District Engineer has concluded that in their permit review, the State agencies have considered and

addressed all water quality issues. DEQ has issued a VPDES permit with limits that will be fully protective of water quality in the Pamunkey River. EPA has reviewed the VPDES permit and the EPA's Regional Administrator has not advised the Corps that the VPDES permit is invalid.

DEQ was not aware that flows from Lake Anna would be reduced from 40 cfs to 20 cfs during times of drought when the VPDES permit was issued for the Totopotomoy wastewater treatment plant. However, DEQ has since stated that the limits allowed under 10-10-3 protect water quality regardless of river flow or effluent discharge rate. DEQ does not believe that these flow changes would interfere with the capacity of the waterbody to assimilate and process pollutants or to maintain State-established water quality standards. The District Engineer does not find reason to disagree with DEQ's assessment.

k. The Corps should not rely on the issuance of the VPDES permit as conclusive of water quality issues and should consider water quality impacts of the project as part of its review. Water quality is one of the public interest factors considered by the Corps when conducting a public interest review. As outlined in Section 8, above, the District Engineer has reviewed the evidence and analytical results submitted by Hanover County, DEQ, VDGIF, VIMS and by the public, and has concluded that all water quality issues have been considered and satisfactorily addressed. The Corps' regulations at 33 CFR 320.4 (d) state "Certification of compliance with applicable effluent limitations and water quality standards required under provisions of Section 401 of the Clean Water Act will be considered conclusive with respect to water quality considerations unless the Regional Administrator, Environmental Protection Agency (EPA), advises of other water quality aspects to be taken into

consideration." EPA's Regional Administrator has not advised the Corps that either the VPDES permit or the VWPP/401 Water Quality Certification is invalid, therefore, the District Engineer accepts as conclusive that the effluent discharge complies with the provisions of the Clean Water Act. According to the preamble to the Corps' Nationwide Permit Program implementing regulations (22 November 1991) at 33 CFR 330 regarding Nationwide Permit 7 for Outfall Structures, "It is the responsibility of EPA pursuant to Section 402 of the Clean Water Act to regulate the effluent of outfall structures. The Corps has responsibility for those activities associated with the construction of these structures." The Corps is not required to validate another agency's permit process. However, the District Engineer has confirmed that when making their permit decisions, all issues and concerns were considered in the State agencies' reviews of this proposal.

l. The Corps should consider the impacts on wetlands of residential development and sprawl that will result from the construction of the Totopotomoy sewage treatment plant. Hanover County's Comprehensive Plan is their primary tool for managing growth that incorporates a phased urban development strategy for the quantity, quality, location and timing of residential, commercial and industrial development in order to prevent urban sprawl and preserve the rural character of the County. Prior to adoption of its Comprehensive Plan, early urban-style development occurred in sprawling, leap-frog style on private, central water and sewer systems. Under Hanover County's Comprehensive Plan, 80 percent of the County will remain rural. Public water and sewer are not planned to be made available in this part of the County and principal land uses will continue to be agricultural, silvicultural, and low density residential. Development in this portion of the County will

only be to the level that can be naturally supported by the land. Hanover County has designated the remaining 20 percent of its land as a "Suburban Service Area" where public water and sewer will be made available and more intense development allowed. Under their urban development strategy for this area, more intense urban-type land uses will occur in small, contiguous areas which are brought into phase to allow for logical, economical, and more environmentally sensitive development.

According to the Corps regulations at 33 CFR 320.4 (j)(2), "The primary responsibility for determining zoning and land use matters rest with state, local and tribal governments. The district engineer will normally accept decisions by such governments on those matters unless there are significant issues of overriding national importance."

m. The discharge will adversely affect fish and wildlife in the Pamunkey River especially anadromous fish. This portion of the Pamunkey River is a spawning area for several species of anadromous fish. In their VPDES permit, DEQ has established discharge limits which are fully protective of water quality and fish and wildlife resources in the Pamunkey River. Likewise, the VMRC permit for the discharge structure has been conditioned to protect migrating fish populations. The National Marine Fisheries Service recommended that no instream work be performed between 15 February and 30 June; that stream bottom contours be restored to their original elevation to prevent the creation of blockages, and that excavated material stored on site be stabilized and contained to prevent sedimentation during storm events. These recommendations will be incorporated as special conditions into any Corps authorization of the work. The District Engineer has determined that potential adverse effects to anadromous fish have been adequately

considered and addressed in the State and federal reviews of the permit applications for the proposed discharge outfall on the Pamunkey River. While there is some potential for minor impact, the various protective conditions included in the necessary permits should minimize any such impact.

n. The discharge will adversely affect the Pamunkey Tribe's shad fishing and shad hatchery which is located 10 miles from discharge site and will endanger shad spawning habitat. The Pamunkey Reservation is located about 10 linear miles downstream of the outfall, but the distance by river miles is closer to 20 miles because of the numerous wide meanders in that section of the Pamunkey River. As outlined in Section 10, above, the District Engineer has determined that potential adverse effects to anadromous fish have been considered and addressed in both the State and federal reviews of this project. All necessary requirements and conditions have been incorporated in order to protect fish and wildlife resources. The issuance of a permit for this project should not adversely affect the Pamunkey Indian Tribe's ability to operate their shad hatchery or to maintain their culture.

o. The discharge will adversely affect recreational uses of the Pamunkey River such as swimming, fishing, boating, and a guided canoe and kayak river tour operation. The Division of Drinking Water, Division of Shellfish Sanitation and local Health District of the Virginia Department of Health have concluded that the project will not result in adverse impacts to public health regarding downstream drinking water intakes, shellfish sanitation, and recreational uses. VDH indicated that they had recommended approval of the treatment work design and transport facilities as they are "…technically adequate to achieve the stream standards established by DEQ for protection of the

Pamunkey River." The District Engineer concurs with these findings.

p. The project will adversely affect the Marlbourne National Historic Landmark, the Newcastle Town archaeological site which is a Virginia Landmarks Register property and the grave of an unknown colonist who has been called "Sybil" by the property owners. As outlined in Section 6 above, the District Engineer concurs with VDHR that as proposed and completed, the project will have no adverse effect on any historic resources that are listed or eligible for listing in the National Register of Historic Places.

q. Hanover County has overstated their need for additional wastewater treatment capacity and has left unused 26% of the existing capacity purchased from Henrico County. Because Hanover County's stormwater system ties into their sewage system, actual wastewater flows fluctuate with the amount of precipitation. Hanover County is currently under their projections for wastewater flow to Henrico primarily due to the extended drought conditions the entire region has been experiencing. However, this has not always been the case. Exact predictions for sewage flow are not possible because future weather conditions and the precise number of new connections to the system are unknown. Since 1998, Hanover County has added over 1,500 new customers to their sewer system and another 4,000 lots currently zoned for development could be connected to the sewer system at any time.

Both the Acting County Manager of Henrico County and the City Manager of the City of Richmond wrote on 25 January 2001 in support of Hanover County's proposal to provide additional wastewater treatment capacity for the region.

Henrico County stated "We believe the construction of a wastewater treatment plant in Hanover County is part of the regional solution of providing utility service within the metropolitan Richmond area. A regional solution does not simply mean that one locality provides services to another locality but that localities work together to provide services to their citizens in the most efficient and effective manner, which is precisely what the jurisdictions in the metropolitan Richmond area have done." Henrico County indicated that in 1997, they advised Hanover County that Henrico County could not satisfy its long-term wastewater treatment needs and suggested that they pursue other alternatives.

The Office of the Governor's Secretary of Natural Resources wrote on 20 December 2001 in support of Hanover County's proposed Totopotomoy wastewater treatment plant and related facilities. The Secretary stated "The additional wastewater treatment that will be provided by this facility is essential to ensure the health, safety and welfare of Hanover citizens and to enable the continued environmentally sound development of the county."

The public and private need for certain categories of activities with minimal individual and cumulative adverse effects on the environment was addressed when the Nationwide Permits were developed by Corps Headquarters. Therefore, such public interest factors as need are not normally considered in the review of a project that meets the terms and conditions of Nationwide Permits.

15. Findings and Decision of the District Engineer: The District Engineer has determined that the decision on this project is not a major Federal action significantly affecting the quality of the human environment. Therefore, no Environmental Impact Statement will be prepared. This

finding is based on information contained in the District's evaluation of the project and comments received from Federal, State and local agencies and the general public.

The District Engineer has fully evaluated Hanover County's application and has determined that it represents a single and complete project and that the applicant has disclosed all reasonably related activities. This determination was made prior to issuance of the District's public notice for permit application 01- V2032. The wetland impacts associated with the originally proposed Totopotomoy interceptor are no longer a part of the project that is before the Corps and are not reasonably foreseeable impacts of this project. The proposed work by others along a portion of the original Totopotomoy interceptor alignment is not reasonably related to Hanover County's project and will be evaluated by the Corps as a part of The Hanover Group's application for a multi-use development. Future treatment and conveyance projects that will be developed by the County when the need arises must be reviewed for compliance with applicable State and federal laws and approved or denied as appropriate.

The individual and cumulative wetland impacts associated with this project are minimal, and there will be no adverse effects to historic resources and no impacts to federally-listed threatened or endangered species. Potential impacts to water quality and anadromous fish have been addressed above and in the State's permits, and EPA did not object to the issuance of the State's VPDES permit or VWPP/401 Water Quality Certification.

Analysis and Documentation: The Norfolk District began a public interest review of the new application under an individual Department of the Army Permit. According to 33 CFR 330.4(e)(3), "The division or district engineer will

restore authorization under the NWPs at any time he determines that his reason for asserting discretionary authority has been satisfied by a condition, project modification or new information." Based on the results of the 14 December 2001 field evaluation, the elimination of the Totopotomoy interceptor as a component of the project, and the fact that no new issues were identified in response to the Public Notice or subsequent coordination with appropriate State and federal resource agencies that would preclude the use of general permits, the District Engineer determined that it was appropriate to consider the project under the Nationwide Permit program.

EPA's 404 (b)(1) Guidelines at 40 CFR 230.6 (b) state: "The Guidelines user, including the agency or agencies responsible for implementing the Guidelines, must recognize the different levels of effort that should be associated with varying degrees of impacts and require or prepare commensurate documentation. The level of documentation should reflect the significance and complexity of the discharge activity." Based on the above findings, the District Engineer has determined that the proposal will result in minimal individual and cumulative impacts to the aquatic environment and that the project qualifies for authorization by Nationwide Permits.

According to EPA's 404(b)(1) Guidelines at 40 CFR 230.6(d), "In the case of activities covered by General permits……..the analysis and documentation required by the Guidelines will be performed at the time of General permit issuance…….and will not be repeated when activities are conducted under a General permit…." EPA's 404(b)(1) Guidelines (40 CFR 230.7(a)), describe the conditions for the issuance of general permits: (1) The activities in such category are similar in nature and similar in their impact

upon water quality and the aquatic environment; (2) The activities in such category will have only minimal adverse when performed separately; and (3) The activities in such category will have only minimal cumulative adverse effects on water quality and the aquatic environment. The District Engineer has determined that projects similar in nature to the one currently before the Corps would generally satisfy the terms and conditions of Corps General Permits as they would not result in more than minimal individual and cumulative adverse impacts to the aquatic environment.

Other Alternatives: Hanover County submitted with their permit application an analysis of the various offsite alternatives that they had considered to provide treatment, conveyance and disposal of wastewater, including reports on engineering, feasibility, wastewater treatment plant site selection, and outfall discharge location prepared by several consulting firms. The analysis includes discussions of regional solutions whereby the County would purchase additional treatment capacity from adjacent localities (Henrico County and the City of Richmond); the expansion of the existing Hanover County treatment plants (Doswell, Ashland and Hanover Courthouse), a number of conveyance and discharge options, and the "no build" alternative. This alternatives analysis was reviewed as a part of the District Engineer's evaluation of the project for on-site minimization of wetland impacts.

On-site avoidance and minimization of wetland impacts at the wastewater treatment plant site was accomplished through site selection orientation of the footprint and establishment of an upland vegetated buffer. Wetland impacts at the Lee Davis pump station were minimized by replacing the originally proposed junction box with a smaller diversion structure and manhole.

The District Engineer has evaluated the alternatives analysis as is appropriate for the level of impact of the project. EPA's 404 (b)(1) Guidelines recognize that the level of analysis required varies with the nature and complexity of impacts and state at 40 CFR 230.7 (b)(1) "...consideration of alternatives in Section 230.10 (a) are not directly applicable to General Permits." It is stated in 40 CFR 230.10 that "Although all requirements in Section 230.10 must be met, the compliance evaluation procedures will vary to reflect the seriousness of the potential for adverse impact on the aquatic ecosystems posed by specific dredged or fill material discharge activities." Also the preamble to the Corps' 1996 Nationwide Permit regulations (page 65911 Paragraph 4 states, "...the "sequencing" requirement for individual permits for off-site avoidance under the section 404(b)(1) Guidelines does not apply to general permits." Had this permit been processed through completion as an individual permit, off-site alternatives would have been investigated and evaluated relative to the proposed alternative. Once a project is determined to meet the terms and conditions of a Nationwide Permit (or combination of Nationwide Permits), consideration of off-site alternatives is no longer necessary or appropriate.

a. Nationwide Permits: After reviewing the project and the modifications incorporated to minimize adverse impacts, the District Engineer has concluded that the proposed work satisfies the terms and conditions of the Corps 2002 Nationwide Permit (NWP) Numbers 7, 12, 18 and 39. The District Engineer's rationale for reaching this determination is based on the following:

NWP 7: Outfall Structures and Maintenance. This Nationwide Permit authorizes:

1. the construction of outfall structures and associated intake structures where the effluent from the outfall is authorized, conditionally authorized, or specifically exempted, or are otherwise in compliance with regulations issued under the National Pollution Discharge Elimination System Program (NPDES) pursuant to Section 402 of the Clean Water Act, and

2. maintenance excavation, including dredging to remove accumulated sediments. The amount of excavated or dredged material must be the minimum necessary to restore the outfalls and/or intakes. The dredged or excavated material must be deposited or retained at an upland site, unless otherwise approved by the Corps under a separate authorization and proper soil erosion and sediment measures are used to minimize reentry of sediments into waters of the U. S.

Rationale: The proposed discharge outfall structure on the Pamunkey River satisfies the terms of NWP 7 as the effluent from the outfall received NPDES authorization from the Virginia Department of Environmental Quality (see Section 8 of this decision document). In addition, the dredging and excavation needed to install the outfall has been minimized to the maximum extent practicable and all dredged and excavated material will be transported to a contained, upland dredged material management site. The County's outfall structure is similar in nature to many other outfall structures that are commonly authorized by the Corps under NWP 7.

NWP 12: Utility Line Activities. This Nationwide Permit authorizes:

1. the construction, maintenance, and repair of utility lines, including outfall and intake structures and associated

excavation, backfill, or bedding for utility lines in all waters of the U. S., provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication.

2. Material resulting from trench excavation may be temporarily sidecast (up to 3 months) into waters of the U. S., provided the material is not placed in such a manner that it is dispersed by currents or other forces. This period may be extended for a period not to exceed 180 days. In wetlands, the top 6" to 12" of the trench should normally be backfilled with topsoil from the trench. Furthermore, the trench cannot be constructed in such manner as to drain waters of the U. S.

Rationale: The proposed utility line activities at the Lee Davis pump station on Beaverdam Creek satisfy the criteria for NWP 12 as the sewer line pipes will be installed in an open-cut trench, excess material will be disposed of off-site, and the substrate will be restored to grade and allowed to re-vegetate with the existing scrub-shrub community. The County's utility line construction at the Lee Davis pump station is similar in nature to many other utility line construction projects that are commonly authorized by the Corps under NWP 12.

NWP 18: Minor Discharges. This Nationwide Permit authorizes:

Minor discharges of dredged or fill material into all waters the U. S. if the activity meets all of the following criteria:

1. the quantity of discharged material and the volume of area excavated do not exceed 25 cubic yards below the plane of ordinary high water mark or the high tide line.

2. the discharge, including any excavated area, will not cause the loss of more than 1/10 acre of a special aquatic site, including wetlands. For the purposes of this NWP, the acreage limitation includes the filled area and excavated area plus special aquatic sites that are adversely affected by flooding and special aquatic sites that are drained so that they would no longer be a water of the U. S. as a result of the project.

3. If the discharge, including any excavated area, exceeds 10 cubic yards below the plane of ordinary high water or the high tide line or if the discharge is in a special aquatic site, including wetlands, the permittee notifies the District Engineer in accordance with the "Notification" General Condition. For discharges in special aquatic sites, including wetlands, the notification must also include a delineation of affected special aquatic sites, including wetlands.

Rationale: The County satisfied the "Notification" requirement through the submission a joint permit application for the entire project. The proposed 30-square foot fill located in a non-tidal wetland for the purpose of constructing a diversion structure and manhole will not cause any flooding or draining of wetlands. This discharge will amount to 1.67 cubic yards. Therefore, the County's proposed permanent fill associated with the diversion structure and manhole satisfies the terms of NWP 18. This small fill is similar in nature to many other small fills that are commonly authorized by the Corps under NWP 18.

NWP 39: Residential, Commercial, and Institutional Developments. This Nationwide Permit authorizes:

1. Discharges of dredged and/or fill material into non-tidal waters of the U. S., excluding non-tidal wetlands adjacent to tidal waters, for the construction or expansion of residential, commercial, or institutional building foundations and building pads and attendant features that are necessary for the use and maintenance of the structures. Examples of institutional developments include schools, fire stations, government office buildings, judicial buildings, public works buildings, libraries, hospitals, and places of worship.

2. the discharge cannot cause the loss of greater than ½ acre of non-tidal waters of the U. S., excluding non-tidal wetlands adjacent to tidal waters and it cannot cause the loss of greater than 300 linear feet of a stream bed, unless for intermittent stream beds this criterion is waived in writing pursuant to a determination by the District Engineer that the activity complies with the other terms and conditions of the NWP and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively.

3. The permittee must notify the District Engineer in accordance with General Condition 13, if any of the following criteria are met: (1) the discharge causes the loss of greater than 1/10 acre of non-tidal waters of the U.S., excluding non-tidal wetlands adjacent to tidal waters; or (2) the discharge causes the loss of any open waters, including perennial or intermittent streams, below the ordinary high water mark, or (3) the discharge causes the loss of greater than 300 linear feet of intermittent stream bed.

4. For discharges in special aquatic sites, including

wetlands, the notification must include a delineation of affected special aquatic sites.

5. The discharge is part of a single and complete project.

6. The permittee must avoid and minimize discharges into waters of the U.S. at the project site to the maximum extent practicable. The notification, when required, must include a written statement explaining how avoidance and minimization of losses of waters of the U.S. were achieved on the project site. Compensatory mitigation will normally be required to offset the losses of waters of the U. S.

7. When this NWP is used in conjunction with any other NWP, any combined total permanent loss of waters of the U.S. exceeding 1/10 acre requires that the permittee notify the District Engineer in accordance with General Condition 13.

8. Any work authorized by this NWP must not cause more than minimal degradation of water quality or more than minimal changes to the flow characteristics of any stream.

9. For discharges causing the loss of 1/10 acre or less of waters of the U.S., the permittee must submit a report, within 30 days of completion of the work, to the District Engineer that contains the following information: (1) The name, address, and telephone number of the permittee; (2) The location of the work; (3) A description of the work; (4) The type and acreage of the loss of waters of the U.S.; and (5) The type and acreage of any compensatory mitigation used to offset the loss of waters of the U.S.

10. If there are any open waters or stream within the project area, the permittee will establish and maintain, to the maximum extent practicable, wetland or upland vegetated buffers next to those open waters or streams consistent with General Condition 19.

Rationale: The examples of institutional developments listed above as qualifying for NWP 39 include several different kinds of municipal buildings similar in nature to this municipal building (the Totopotomoy wastewater treatment plant). The impacts upon water quality and the aquatic environment from construction of the Totopotomoy wastewater treatment plant are similar in nature to the impacts of many kinds of institutional developments commonly authorized by the Corps under NWP 39. The completed wetland impacts for the Totopotomoy wastewater treatment plant adjacent to Totopotomoy Creek consist of fill in non-tidal wetlands for drainage improvements and the preparation of a pad for a future biological treatment tank associated with a public works project.

The activity has resulted in the loss of 0.16 acres of non-tidal headwater wetlands including 239 linear feet of headwater intermittent stream bed, which does not exceed the ½ acre threshold stipulated in NWP 39. Notification of the work was provided in the form of pre-application 99-R0875, and permit applications 99- V1877 and 01-V2032. A wetland delineation for the wastewater treatment plant site was submitted and confirmed by the Corps. The District Engineer has determined that the discharge for the wastewater treatment plant is one of the components that together form a single and complete project. Hanover County submitted a written statement outlining their efforts to minimize wetland impacts at the project site to the greatest extent possible through orienting the footprint to avoid impacts to wetlands

on the eastern portion of the property. The applicant has proposed and the Corps has accepted as mitigation for the unavoidable wetland losses, in-lieu fee contribution to the Virginia Wetlands Restoration Trust Fund.

A sedimentation basin constructed at the toe of the slope will protect Totopotomoy Creek from any water quality degradation that might have resulted from erosion and sedimentation from the wastewater treatment plant site. The flow characteristics of 239 linear feet of headwater intermittent stream were impacted by grading and site preparation; however, the stream flow continues to reach Totopotomoy Creek. Submittal of a report containing the information required above will be a condition of the Corps authorization of this project. Through site design, the applicant has maintained a vegetated upland buffer between the facility and the wetlands and waters of Totopotomoy Creek.

b. Nationwide Permit General Conditions: All of the Corps' NWPs have general conditions that must be followed in order for any authorization by a NWP to be valid. These general conditions are listed below followed by the District Engineer's assessment of how this project meets the condition.

Condition 1: Navigation. The proposed utility line and wastewater treatment plant are not located in navigable waters of the U. S. and will, therefore, not impact navigation. However, the proposed outfall structure is located in navigable waters of the U. S. The outfall structure will extend about 60 feet from the base of the bank with only the diffuser structures sitting above the river bottom. The diffusers will be under approximately 10 feet of water at ordinary high water and should not adversely affect

navigation.

Condition 2: Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety. The Hanover County Department of Public Utilities has a maintenance department consisting of 19 employees with full-time responsibility for maintaining the County's water and sewer systems. The County also employs various contractors to assist with maintenance activities when required.

Condition 3: Soil Erosion and Sediment Controls. The County is required to adhere to the provisions of Virginia's Soil Erosion and Sedimentation Control Law to minimize erosion and sedimentation. This includes placement of riprap and an erosion matting material on the Pamunkey River bank to stabilize the slope and prevent erosion; performing work in the river within a turbidity curtain; and the construction of a sedimentation basin at the bottom of the slope between the wastewater treatment plant site and Totopotomoy Creek.

Condition 4: Aquatic Life Movements. No activity may substantially disrupt the necessary lifecycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. The proposed utility line and sewage treatment plant will not be located in navigable waters of the U. S. The proposed outfall structure will be located in navigable waters, however, it has been designed so as not to block aquatic life movements and includes the prohibition of chemical and physical barriers to the movement of anadromous fish.

Condition 5: Equipment. Any equipment that needs

to be located in wetlands to install the proposed utility line or the wastewater treatment plant will be placed on mats or other measures taken to minimize soil disturbance.

Condition 6: Regional and Case by Case Conditions: The Norfolk District has developed regional conditions for NWP 12 concerning access roads and notification procedures for discharges involving utility line substations and permanent or temporary access roads. This project does not involve access roads or utility line substations, therefore, the Norfolk District's regional conditions do not apply. Several case specific special conditions, listed in Section c. below, will be included as conditions of the Nationwide Permit verification.

Condition 7: Wild and Scenic Rivers. The Commonwealth of Virginia has no federally approved wild and scenic rivers.

Condition 8: Tribal Rights. The Pamunkey Indian Tribe is not a federally-recognized tribe, and their treaty is held by the Commonwealth of Virginia, not the federal government. Therefore, the Corps' permit decision could not violate any treaty rights. Nonetheless, the issue of potential impairment of the ability of the Pamunkey Tribe to continue their shad fishing and shad hatchery operations is addressed in Section 10 of this decision document. Potential adverse effects to anadromous fish have been considered and addressed in both the State and federal reviews of this project and all necessary requirements and conditions have been incorporated in order to protect fish and wildlife resources. The issuance of a permit for this project should not adversely affect the Pamunkey Tribe's rights associated with their use of the Pamunkey River.

Condition 9: Water Quality. This issue is addressed in Section 8 of this decision document. The project will result in only minimal adverse impacts to water quality. The District Engineer has concluded that DEQ considered all applicable chemical, physical and biological measures to be adequately protective of water quality in the Pamunkey River and that sufficient administrative and regulatory controls are in place to ensure that water quality standards in the Pamunkey River are met.

Condition 10: Coastal Zone Management. The project complies with all the enforceable programs under Virginia's Coastal Resources Management Program. Condition 11: Endangered Species. The project was coordinated with the U. S. Fish and Wildlife Service pursuant to the Corps' responsibility under Section 7 of the Endangered Species Act. In response, the Service advised the District Engineer that the project would not affect any federally-listed threatened or endangered species or any proposed or designated critical habitat.

Condition 12: Historic Properties. The project was coordinated with the Virginia Department of Historic Resources. The District Engineer's review of this public interest factor is contained in Section 6 of this decision document. The District Engineer and VDHR concur that as proposed and completed the project will have no adverse effect on any historic resources that are listed or eligible for listing in the National Register of Historic Places. The District will include all of VDHR's recommendations as conditions of any permit issued on this project.

Condition 13: Notification. The County submitted a pre-application and two permit applications for the proposed activities and has, therefore, clearly complied with this

condition.

Condition 14: Compliance Certification. A compliance certification form, which the County must complete and submit to the Corps within 30 days of completion of the project, will be attached to the Nationwide Permit verification.

Condition 15: Use of Multiple Nationwide Permits. This condition prohibits the use of multiple Nationwide Permits except when the authorized loss of waters of the U. S. does not exceed the acreage limit of the Nationwide Permit with the highest specified acreage limit. With respect to this project, the applicable Nationwide Permit with the highest acreage is Nationwide Permit 39 which authorizes up to ½ acre of impacts to waters of the U. S., including wetlands. The total loss of waters and wetlands proposed by this project is 0.1624 acres (7,074 square feet). Therefore, the work can be authorized by multiple Nationwide Permits.

Condition 16: Water Supply Intakes. This condition does not apply to this project as the applicant is not proposing a water supply intake.

Condition 17: Shellfish Beds. There are no shellfish beds in this portion of the Pamunkey River.

Condition 18: Suitable Material. The proposed fill will consist of clean fill and be free of toxic pollutants in toxic amounts.

Condition 19: Mitigation: The 0.1624-acre permanent fill proposed in waters of the U. S. is associated with the Lee Davis pump station utility line (0.0007 acres of scrub-shrub wetlands) and the wastewater treatment plant (0.1417 acres

of forested and scrub-shrub wetlands and 0.0200 acres of waters of the U. S.). The applicant submitted a mitigation plan for 0.82 acres of wetland creation, 7.83 acres of wetland preservation, and 1.31 acres of riparian buffer or to make a voluntary contribution to the Virginia Wetlands Restoration Trust Fund. The District Engineer has determined that either of these mitigation plans would offset the loss to wetlands.

Condition 20: Spawning Areas. This portion of the Pamunkey River is a spawning area for several species of anadromous fish. The project was coordinated with the National Marine Fisheries Service who recommended that no instream work be performed between 15 February and 30 June; that stream bottom contours be restored to their original elevation to prevent the creation of blockages, and that excavated material stored on site be stabilized and contained to prevent sedimentation during storm events. These recommendations have been incorporated into the NWP verification as special conditions.

Condition 21: Management of Water Flows. The project does not involve any activity that will affect pre-construction downstream flows or permanently restrict or impede the passage of normal or expected high flows.

Condition 22: Adverse Effects from Impoundments. The project does not involve any work that will impound water.

Condition 23: Waterfowl Breeding Areas. The project is not located in any known migratory waterfowl breeding areas.

Condition 24: Removal of Temporary Fills. The permit verification has been conditioned to require the

removal of all temporary fills.

Condition 25: Designated Critical Resource Waters. The project is not located in any designated critical resource waters.

Condition 26: Fills Within the 100-Year Floodplains. The applicant must comply with any applicable FEMA-approved State or local floodplain management requirements. The gravity sewer line and forcemain associated with the Lee Davis pump station will be constructed within the 100-year floodplain above the headwaters. The diversion structure and manhole will result in a permanent above-grade fill. The Hanover County Department of Public Works has verified that the proposed pump station and its appurtenances meet all of the criteria of the Hanover County Floodplain and Drainage Control Ordinances.

Condition 27: Construction Period. For projects that have been verified by the Corps, an extension of the completion date may be requested. The Nationwide Permit verification will be valid until 18 March 2007. If the County needs additional time to complete any work in waters of the U. S., they must request and be granted an extension.

c. Special Permit Conditions: As demonstrated above, the District Engineer has determined that the proposed and completed work satisfies the terms and conditions of Nationwide Permits 7, 12, 18 and 39. Therefore, he has determined that authorization of the proposed work under Nationwide Permits, with the appropriate and applicable special conditions listed below, is not contrary to the public interest.

- Any existing structures associated with the influent pump station will be removed to 4 feet below the ground surface and the area will be filled, graded and seeded.

- VDHR and the Norfolk District shall be notified immediately if human burials are discovered within the project boundaries during project implementation.

- In-stream work for the construction of the outfall structure and diffuser in the Pamunkey River is prohibited from 15 February through 30 June of any year in order to protect the spawning and nursery habitat of anadromous fish species.

- Pamunkey River bottom contours must be restored to their original elevation to prevent the creation of blockages, and any excavated material stored on site must be stabilized and contained to prevent sedimentation during storm events.

- The County shall submit to the Norfolk District plans depicting the method of construction access and installation of the discharge outfall, along with the name of the contractor performing the work and anticipated dates of construction prior to the commencement of work in waters of the U. S.

- The County must submit a report within 30 days of completion of the work to the District Engineer that contains the following information: (1) The name, address, and telephone number of the permittee; (2) The location of the work; (3) A description of the work; (4) The type and acreage of the loss of waters of the U.S.; and (5) The type and acreage of any

compensatory mitigation used to offset the loss of waters of the U.S.

- The County shall minimize clearing of the wooded bank on the Pamunkey River to the maximum extent practicable and shall employ appropriate measures to control erosion.

- The Pamunkey River bank shall be re-vegetated with a mixture of herbaceous and woody vegetation appropriate to the site. A re-vegetation plan shall be submitted to the Corps of Engineers, Norfolk District for approval. The plan shall include a list of species, planting rates and a schedule for restoring and re-vegetating the bank. Bank disturbance for site preparation and construction may not proceed until the plan for re-vegetation has been approved by the Corps.

- As the sedimentation basin cannot be used for a mitigation site until construction is completed at the wastewater treatment plant site, the County shall make an in-lieu fee contribution of $42,759 to the Virginia Wetlands Restoration Trust Fund as compensation for the wetland and intermittent stream impacts associated with this project.

- Future development of the multi-project wetlands mitigation site at the wastewater treatment plant site shall not proceed until the Corps has conducted the required coordination with VDHR for potential adverse effects to historic resources.

This completes the District Engineer's review of the above activities. His decision is to issue Nationwide Permit

verification for the work this date under NWPs 7, 12, 18 and 39.

PREPARED BY:

Pamela K. Painter, P.G., P.W.S. April 4, 2002
Environmental Scientist
Regulatory Branch

REVIEWED BY:

Michael A. Schwinn April 4, 2002
Chief, Western Virginia Regulatory Section

FOR AND IN BEHALF OF THE DISTRICT ENGINEER,
COLONEL DAVID L. HANSEN:

APPROVED BY:

J. Robert Hume, III April 4, 2002
Chief, Regulatory Branch

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

FILED
April 25, 2003

No. 02-1946
CA-02-253-3

FRANCES BROADDUS CRUTCHFIELD; HENRY RUFFIN BROADDUS

Plaintiffs - Appellees

v.

COUNTY OF HANOVER

Defendant - Appellant

and

UNITED STATES ARMY CORPS OF ENGINEERS

Defendant

GREATER RICHMOND PARTNERSHIP, INCORPORATED; GREATER RICHMOND CHAMBER OF COMMERCE; HANOVER BUSINESS COUNCIL; LOCAL GOVERNMENT ATTORNEYS OF VIRGINIA, INCORPORATED; VIRGINIA ASSOCIATION OF COUNTIES; VIRGINIA ASSOCIATION OF MUNICIPAL WASTEWATER AGENCIES, INCORPORATED

(VAMWA)

Amicus Supporting Appellant

No. 02-2153
CA-02-253-3

FRANCES BROADDUS CRUTCHFIELD; HENRY RUFFIN BROADDUS

Plaintiffs - Appellees

v.

UNITED STATES ARMY CORPS OF ENGINEERS

Defendant - Appellant

and

COUNTY OF HANOVER, VIRGINIA

Defendant

GREATER RICHMOND PARTNERSHIP, INCORPORATED; GREATER RICHMOND CHAMBER OF COMMERCE; HANOVER BUSINESS COUNCIL; LOCAL GOVERNMENT ATTORNEYS OF VIRGINIA, INCORPORATED; VIRGINIA ASSOCIATION OF COUNTIES; VIRGINIA ASSOCIATION OF MUNICIPAL WASTEWATER AGENCIES, INCORPORATED (VAMWA)

Amicus Supporting Appellant

On Petition for Rehearing and Rehearing En Banc

Appellants' petition for rehearing and rehearing en banc was submitted to this Court. As no member of this Court or the panel requested a poll on the petition for rehearing en banc, and

As the panel considered the petition for rehearing and is of the opinion that it should be denied,

IT IS ORDERED that the petition for rehearing and rehearing en banc is denied.

For the Court,

/s/ Patricia S. Conner

_____

Clerk

ADMINISTRATIVE PROCEDURE ACT

5 U.S.C. § 706

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall -

(1) compel agency action unlawfully withheld or unreasonably delayed; and

(2) hold unlawful and set aside agency action, findings, and conclusions found to be -

(A) arbitrary, capricious, and abuse of discretion, or otherwise not in accordance with law;

(B) contrary to constitutional right, power, privilege, or immunity;

(C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;

(D) without observation of procedure required by law;

(E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or

(F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

154 F.Supp.2d 878
53 ERC 1761
(Cite as: 154 F.Supp.2d 878)

United States District Court,
E.D. Virginia,
Richmond Division.

Frances Broaddus CRUTCHFIELD and Henry Ruffin Broaddus, Plaintiffs,
v.
UNITED STATES ARMY CORPS OF ENGINEERS and County of Hanover, Virginia,
Defendants.

No. Civ.A. 300CV525.

Aug. 14, 2001.

William B. Ellis, Ellis & Thorp, Richmond, VA, for Plaintiffs.

M. Hannah Lauck, United States Attorneys Office, Richmond, VA, Gregory S. Williams, U.S. Department of Justice, Environmental Defense, Richmond, VA, Katherine D. Will, U.S. Army Corps of Engineers, Norfolk, VA, for U.S. Army Corps.

Sterling E. Rives, III, Hanover County Attorney's Office, Hanover, VA, William G. Broaddus, Robert M. Tyler, McGuire Woods LLP, Richmond, VA, for Hanover Co.

MEMORANDUM OPINION

PAYNE, District Judge.

In this action, Frances Broaddus Crutchfield and Henry Ruffin Broaddus challenge the authorization, under the Clean Water Act ("CWA"), by the United States Army Corps of Engineers ("the Corps") of Nationwide Permits ("NWPs") for the County of Hanover ("the County"). The NWPs verify the construction, without preparation of an Environmental Assessment or an Environmental Impact Statement as required by the National Environmental Policy Act ("NEPA"), of a wastewater treatment plant ("WWTP"), discharge force main, and an outfall [FN1] by the County. It is also alleged that the NWPs were unlawfully verified because the Corps did not first comply with the National Historic Preservation Act ("NHPA"). The challenges center around the relationship of the WWTP, force main and outfall components of a sewage treatment project to a sewer interceptor that is proposed to transport sewage to the WWTP and that, until recently, was referred to as a component of that sewage ***881** treatment project. [FN2]

FN1. The administrative record and pleadings refer to this component as an outfall, outfall diffuser, discharge outfall, diffuser, or outfall. This Memorandum Opinion will refer to it as an outfall.

FN2. Some early documents refer to three components: WWTP, force main/outfall, and interceptor. Most early documents refer to four components: WWTP, force main, outfall, and interceptor.

Crutchfield and Broaddus challenge the NWPs under three substantive statutes and the Administrative Procedure Act ("APA"). Claim 1 alleges that the verification of the NWPs for the WWTP, force main, and outfall by the Corps violates the CWA, 33 U.S.C. §§ 1251 *et seq.*, and the Corps' regulations, 33 C.F.R. § 325.1 and 33 C.F.R. § 330.6. Claim 2 alleges that the verification of the NWPs violates NEPA, 42 U.S.C. §§ 4321 *et seq.* Claim 3 alleges that the verification of the NWPs violates the NHPA, 16 U.S.C. § 470 *et seq.*

The gravamen of each claim is that, in verifying the NWPs, the Corps improperly failed to take into account the impact of the planned Totopotomoy Creek Sewer Interceptor (hereinafter the "TC Interceptor") on the environment and on historic resources. Broaddus and Crutchfield argue that the TC Interceptor is simply another component of a complete project that includes, as its other components, the WWTP, force main, and outfall. The parties agree that a project may not proceed under an NWP if the Corps concludes that it has "more than minimal individual or cumulative net adverse effects on the environment or otherwise may be contrary to the public interest." C.F.R. § 330.1(d). It is undisputed that the entire project, i.e. the WWTP, force main and outfall and the TC Interceptor, if considered as a whole, was expected to have more than a minimal impact and that the Corps did not find otherwise. It is undisputed that the impact of the WWTP, force main and outfall is quite small and that the TC Interceptor, standing alone, was expected to have a more than minimal impact. [FN3]

FN3. At a pre-application meeting among the Corps, the County, and Timmons, it was determined that the TC Interceptor could not proceed under an NWP.

> R453. Actions that have a more than minimal impact cannot proceed under NWPs and this Court deduces that the TC Interceptor will have, or was expected to have, a more than minimal impact.

Broaddus and Crutchfield contend that the Corps acted arbitrarily and capriciously and in violation of law and regulation when, on a contrived, irrational basis, it did not take into account the impact of the TC Interceptor in verifying the NWPs here at issue. This, say the Plaintiffs, was the result of the improper manipulation of the permit process and the applicable permit regulations by the Corps and the County.

For the reasons set forth below, the action of the Corps verifying NWPs for the WWTP, force main, and outfall is found to be arbitrary, capricious and unlawful and, therefore, is set aside.

THE FACTS OF RECORD

Review of the Corps' decisions must be based on the record. Hence, the facts in the record are set forth in detail.

A. Early Days

Many years ago, the County identified its growing wastewater treatment needs and developed a sewage treatment project, the components of which were a WWTP, force main, outfall, and interceptor, to meet those needs. "Construction of the wastewater treatment plant is critical to the County implementing its Comprehensive Plan where growth is directed into the 'Suburban Service Area' in order to preserve the rural character of the remainder ***882** of

Hanover County." R426. [FN4] Although a WWTP in the general vicinity of the proposed WWTP has been part of the County's comprehensive plan since 1972, R426, the County did not purchase the site for the proposed WWTP until 1997. R593. The County's plans envision that the sewage treated in the WWTP is to be transported by a discharge force main to an outfall which will discharge the treated effluent into the Pamunkey River approximately 43,500 feet from the plant. R426-27. The TC Interceptor, like the WWTP, has "been shown in the [County's] Comprehensive Plan for many years." R426.

> FN4. This Memorandum Opinion will cite the administrative record with "R" followed by the page number.

B. The Developments in 1997, 1998 and Early 1999

The TC Interceptor here at issue is the fourth phase of a sewer interceptor, the first phase of which was designed in 1983 and placed in service in 1985. The fourth phase TC Interceptor is the link between the existing interceptor and the WWTP.

The County's long-term plan began to jell when, in 1997, it settled on the exact location of the WWTP. In a report dated February 10, 1997, the County's outside consulting engineering firm, Timmons, recommended that the current location of the TC Interceptor be where it is today. R247-51. In that report (Totopotomoy Basin Wastewater Transport Options Letter Report), Timmons outlined the Basis of Analysis animating its recommendation. Among the "assumptions" used for those recommendations were:

- Totopotomoy Creek *WWTP* will be *completed by 2002.*
- *Flow* from pump station # 5 (Atlee High School) *needs to be conveyed to the new WWTP at the time of its opening* to provide sufficient flow for proper operation.

R248 (emphasis added). Thus, the record shows that the flow from the TC Interceptor is linked to the WWTP not only as the source of supply for the raw material that is to be treated at the WWTP, but also to assure proper operation of the WWTP itself. Even though site selection for the WWTP was not complete in 1997, the assumed site for the plant in February 1997 was the one on which the WWTP actually will be located. The February 1997 Letter Report on sewage transport options discusses three alternative modes for the proposed interceptor:

- Alternative A: Single Gravity Sewer
- Alternative B: Parallel Gravity Sewer
- Alternative C: Force Main.

R248-49. However, that report makes no mention of a location for the proposed TC Interceptor other than the one here at issue.

The February 1997 Letter Report on sewage transport options recommended the TC Interceptor be designed under Alternative A because the overall cost was less than two alternatives (neither of which was the Powhite Creek Pump Station which will be discussed later) and because "*[e]nvironmental permitting for utility lines fall under Nationwide permits at this time* and are relatively straightforward. *Future permitting requirements are unknown but are expected to become increasingly difficult* as new and more regulations are promulgated." R250 (emphasis added). Six months later, in August 1997, the County's Board of Supervisors issued a conditional use permit for a sewer interceptor running along Totopotomoy Creek to the site of the proposed ***883** WWTP. R232. The location of the

sewer line in the conditional use permit is the current location of the TC Interceptor.

Further work was performed by Timmons in the form of a Preliminary Engineering Report "for the proposed sewer interceptor which will convey sewage to the new Totopotomoy Wastewater Treatment Facility." R28. This, of course, was of considerable importance because "[t]he collection system [the sewer interceptor] is a sizeable portion of the *treatment system's* capital cost." *Id.* (emphasis added). According to the October 6, 1998 "Final Draft of the Totopotomoy Creek Sewer Interceptor Preliminary Engineering Report" ("P.E.R.") (a rather voluminous study):

> The anticipated construction of a new wastewater treatment plant (WWTP) in Hanover County has dictated that planning commence to determine how the wastewater will be transported to the new WWTP.

R28. Among the tasks assigned to Timmons was the selection of the "proposed route for the sewer interceptor" and "a preliminary design" for it. R28-29. The proposed sewer interceptor as selected and designed by Timmons in October 1998 is shown on a map attached to the P.E.R. R32. It begins at an existing sewage pump station (Pump Station No. 5) and runs east along Totopotomoy Creek for approximately 32,000 feet to the proposed WWTP. R426-27. The proposed interceptor is labeled on the map as "PROPOSED TOTOPOTOMOY CREEK SEWER INTERCEPTOR." R32.

During the fall of 1998, Broaddus and Crutchfield, who thought that they had convinced the County to move the outfall from their property, learned that the County had reverted to the plan to locate the outfall on their property. As a result of this change of plans, Broaddus and Crutchfield, through their counsel, communicated with state

and federal officials, including the Corps, on the subject. R269-70, 279-93. In the course of that correspondence, counsel for Broaddus and Crutchfield expressed the view that the County would not be able to secure NWPs for the Totopotomoy wastewater treatment system because of the quantum of environmental and historical impacts of the project. R280, 293. On February 8, 1999, counsel for Broaddus and Crutchfield informed Elaine Holley (the Corps officer located in the County) that the County contemplated building the WWTP, TC Interceptor, force main and outfall and said that:

> We anticipate that, at some point, *Hanover County will be filing a permit application* with the Corps of Engineers in connection with this proposal. As you will see from the attached comments, there are substantial reasons to believe that *the effects of the project would be "more than minimal"* [the words of art that foreclose use of the NWP process] *and that an individual permit* [rather than an NWP] *therefore will be required.*

R296 (emphasis added). On March 18, 1999, the Chief of the Regulatory Branch at the Corps' Norfolk office stated that "[t]he Corps has not received an application for the project nor have we been contacted by the project proponent." R321.

The record here is thus that, in the spring of 1999, the County considered that the TC Interceptor could be built under NWP 12, but that Broaddus and Crutchfield considered otherwise and so informed the Corps which, as of March 1999, had not been in communication with the County on the project. Also, at this time, the County planned to construct the WWTP, the force main, the outfall and the TC ***884** Interceptor so that all would be operational by 2003. The plan was that the sewage would reach the plant through the TC Interceptor. No other transport method,

including the Powhite Creek Pump Station, was under consideration.

C. The "Pre-Application Package" and the "Pre-Application Meeting"

On June 16, 1999, the County submitted to the Corps a "Pre-Application Package" (dated June 3, 1999). R424-32. According to that package, the WWTP will impact approximately 0.028 acres of wetlands for construction of the influent pump station and have no impact on waters; [FN5] construction of the force main will not have a permanent impact on wetlands or waters, but will temporarily impact approximately 0.06 acres of wetlands and/or waters; the outfall "will not have permanent impacts to wetlands or waters of the United States except for placement of the outfall diffuser on the river bottom." R427-28. And, according to that package, the TC Interceptor involves 35 acres of wetlands within 65 feet of the easement, of which 22 would be disturbed initially and 9 would be permanently cleared. R429, 451.

> FN5. According to the August 23, 1999 cover letter from Timmons seeking verification for the WWTP, construction of the WWTP would impact 0.15 acres of wetlands. R463.

As described in the Pre-Application Package, the County considered it necessary to have all components of its long-term plan--the WWTP, force main, outfall, and TC Interceptor--operational between June 2002 and January 2003 to meet its growing wastewater treatment needs. R28, 426. The Pre-Application Package explains:

> In order to meet the wastewater treatment needs of its citizens, Hanover County is planning to construct a new 5 million gallon per day (mgd) wastewater treatment plant on a 128 acre tract of land located off Pole Green Road approximately one mile east of Rural Point Road. The plant is being planned so that it can eventually be expanded to a 30 mgd facility if required. *A 32,000 feet interceptor sewer will carry raw wastewater to the wastewater treatment plant,* and a discharge force main will transport the treated effluent to a Pamunkey River discharge located approximately 43,500 feet away from the plant.
> R426 (emphasis added).

The purpose of the Pre-Application Package was "to introduce regulatory agencies involved in the Section 401/404 permitting process [under the CWA] to construction activities and permanent improvements associated with Hanover County's proposed Totopotomoy Creek interceptor sewer and wastewater treatment projects." *Id.* In making the explanation, the County said:

> To convey wastewater from the Suburban Service Area to the new wastewater treatment plant, a gravity interceptor sewer is proposed along Totopotomoy Creek. *This gravity interceptor sewer will begin [a detailed description of path of the gravity sewer is given and it is the TC Interceptor].* This line is being designed with a nominal capacity of approximately 15 mgd.
> R426-27 (emphasis added).

The Pre-Application Package does not suggest any means of transport for sewage to the WWTP other than the proposed TC Interceptor.

A review of the record thus establishes that, early on, the County conceived of the WWTP, force main, outfall, and TC Interceptor as four components of the wastewater treatment project that was necessary to meet the County's growing

wastewater ***885** treatment needs. This project needed to be operational between June 2002 and January 2003. That was also the state of affairs as of June 3, 1999, when the County sent its plans to the Corps for its review and comments.

Timmons, the County's consultant on the project, sent a letter to the Corps dated June 4, 1999. The subject reference was: "Re: Totopotomoy Creek Interceptor Sewer and Wastewater Treatment Plant (Hanover County, Virginia)." R433. The opening paragraph of that letter tells the Corps that the "infrastructure proposed" is a WWTP, an outfall, force main to the outfall, and an "approximately 32,000 linear feet of gravity sewer interceptor [the TC Interceptor] carrying wastewater along Totopotomoy Creek to the proposed wastewater treatment plant." *Id.*

Timmons went on to explain that, "[b]ased on the preliminary designs of *these infrastructure components,* we *anticipate authorization* for these projects *through the nationwide permit program, including* Nationwide Permit 26 for the proposed wastewater treatment plant, Nationwide Permit 7 for the proposed outfall structure, and *Nationwide Permits 12 and 33 for the proposed force main and gravity sewer interceptor.*" R433 (emphasis added). The copy of that letter in the record (apparently from the Corps' files) is annotated with the handwritten word "doubtful" which is connected by a line drawn from the word "doubtful" to the words "nationwide permit program" which the letter says is the "anticipated" vehicle by which the Corps was expected to authorize the project. *Id.* [FN6]

> FN6. Although the letter makes reference to discussions about "several specific areas of the proposed gravity sewer interceptor where the

> alignment has not been finalized," nothing in the Pre-Application package or the post-meeting notes mention the Powhite Creek Pump Station. Nor can one conclude from the record that the unsettled alignment referred to a location there. Instead, it appears that the reference has to do with placement of a few sections of the TC Interceptor.

A pre-application meeting with representatives of the Corps, the County, and Timmons took place on July 14, 1999. R443, 448-53. Handwritten notes on an agenda from this meeting are in the record at R448-50. It is not clear who took these notes; however, the notes contain the cryptic entry:

> --Co. sees interceptor + plant as 2 sep. projects ==> no problem
> --if intercept. no go; plant still needed to tre. w portion of Co.

R449.

Timmons prepared a memorandum that represents itself to be the "interpretation [by Rick Thomas of Timmons] of the discussions and decisions made at the [July 14] meeting." R452-53. The memorandum, which was sent to the meeting participants, including David Knepper of the Corps, states:

> The Totopotomoy Creek sewer interceptor, wastewater treatment plant, outfall force main, and outfall discharge have been presented together in the pre- application package. The County indicated that these projects are separate projects that are well coordinated to provide wastewater collection, treatment, and discharge. Therefore, each project should be permitted separately, with the exception of the outfall force main and outfall discharge into the Pamunkey River.

R452. The memorandum also explains that "[a]ppropriate authorization for the interceptor sewer has not been determined. The COE indicated that additional field review is required, and coordination with the Virginia Department of Historic Resources *886 will be required." R453. It was at this point that the County began to refer to what had been a four-component project as three different projects.

The record reflects then that, by July 1999, the County was aware that the applicable regulatory program for NWPs was soon to be revised, that the revisions were expected to be more strict, and that the Corps had not reacted favorably to the proposal that the entire project proceed under NWPs. The record also shows that the County and the Corps arrived at a solution to this conundrum at the July 14 meeting: segment the project so that the TC Interceptor, the component that foreclosed a "not more than minimal" impact finding, would be excised from the project and treated as a project in its own right.

It is significant to note that, as of July 14, 1999, the only record reference to the TC Interceptor as anything other than one of four components of the County's wastewater treatment project is the terse reference in the notes (R449) made by some unidentified person on July 14, 1999. Nonetheless, the Corps appears to have accepted the assertion of separateness reflected in those notes, notwithstanding that the County's plans, some of which were in the hands of the Corps, demonstrated that not be the case.

D. The County's Request for NWP Verification and the Public Opposition

Thereafter, acting on what it understood to be the approval of the Corps, the County, in a package dated August 23,

1999, sought verification for NWP 26 from the Corps for the WWTP. R463. Shortly thereafter, in a package dated September 28, 1999, the County submitted to the Corps a joint permit application for the force main and outfall. R470.

Sometime between August and September 1999, when the County sought verification under NWPs for the WWTP and for the force main and outfall, Broaddus and Crutchfield learned about the applications. They filed objections on October 30, and November 1, 1999. R549-50.

On November 2, 1999, the Corps (responding to an earlier request) sent a copy of the requests for verification to counsel for Broaddus and Crutchfield. R552. Also, on November 2, 1999, counsel for Broaddus and Crutchfield sent a letter to the Virginia Marine Resources Commission explaining that, in his view, the County was trying to "piecemeal" the project by dividing "one single and complete activity ... into several discrete segments ... *to evade proper regulatory scrutiny* of and consideration of alternatives to the overall project." R555 (emphasis added). A copy of that letter was sent to Knepper at the Corps. *Id.*

On November 2, 1999, Timmons wrote to Knepper of the Corps that "[t]his permit verification [the regulatory act of authorizing the NWPs] *is extremely time sensitive in light of the pending NWP-26 expiration,* and the County's intention of conducting the permitted activity prior to the NWP-26 expiration." R554 (emphasis added). In other words, by November 2, the Plaintiffs and others had started to complain to the Corps, and other regulators (with copies to the Corps), about the permitting approach being pursued by the County; and the County, anxious about the limited time left to qualify under the NWPs, began to press the Corps for help in

expediting verification of the pre-notification for the NWPs for the WWTP and the force main and outfall.

Between November 3 to November 9, 1999, the Corps and the Virginia Marine Resources Commission received several complaints about the "piecemeal" applications ***887** permitting process being pursued for the WWTP, force main and outfall, and TC Interceptor, including another letter from counsel for Broaddus and Crutchfield. R557-63. In that letter, counsel for the Plaintiffs asserted that "[a]t present, it is clear that ... [the County] is attempting to 'piecemeal' this project, and that it has not yet submitted a complete application to you." R557. The letter continued: "[t]he obvious purpose of this ploy is to evade regulatory scrutiny of the overall project and consideration of appropriate alternatives to the overall project," as is required for individual permits and for major federal actions significantly affecting the environment under NEPA. *Id.* The Plaintiffs thus asked the Corps to reject the pre-notification for NWP treatment for the WWTP and the force main and outfall. Other affected persons tendered similar complaints.

Confronted by this opposition, the Corps began to act as if the County and it had not reached an agreement about the permitting approach on July 14 (and perhaps, in fact, there was no agreement--merely suggestions). For example, on November 9, 1999, Knepper, of the Corps, informed Thomas, of Timmons, that the Corps had "received a letter of opposition that gives an argument why they think *all three components* should be considered as a single project (interceptor + treatment plant + forcemain and outfall)" and that the Chiefs (Corps officials) "will discuss this project at their meeting today and make a decision." R564. The next day, November 10, 1999, Knepper told Thomas that "the chiefs did not meet yesterday" and that the decision (whether

to consider all components separately or as one project) would not be made until the chiefs met again on November 16. R569. Knepper also commented: "if you want to write down the reasons why you feel each of the three components should be viewed separately, feel free to e-mail it to me and i[sic] will give a copy to each of the chiefs for review." R569.

Then, in an e-mail reply to Knepper also dated November 10, 1999, Frank Harksen, the Director of the Hanover County Department of Public Utilities, wrote:

> Following our July 14, 1999 Permit Kickoff Meeting we hosted, I have not been tuned into the day to day activities associated with the permitting effort which is why *your November 9, 1999 message concerning the possible issuance of a single permit for all three (3) projects [WWTP, force main and outfall, and TC Interceptor] came as a surprise. This is a significant change from what we agreed to back in July* but I understand the sensitivity associated with these permits due to the increased attention our applications have received and I can read an organizational chart--clearly Mr. Jones has the final say. Back during the July meeting we spent the better part of two (2) hours discussing the projects and providing our position *on the independence of each project* and why we felt it was appropriate to permit them separately. *At that time I believe our rationale was sufficient to convince you* that our approach was justified and supportable--*and you offered some permitting alternatives. Since I was not aware the 'single permit possibility' was still under consideration* or that Mr. Ellis had submitted his letter, I have not expended the resources necessary to reduce our presentation to a concise written statement. However, I will certainly *take you up on your offer* to accept our written position statement and will initiate preparation of

the document.

R568 (emphasis added). Significantly, that communication did not mention the ***888** Powhite Creek Pump Station alternative to the TC Interceptor. Also, by early November, 1999, the County found itself having to defend its position on what it thought was, as of July 1999, a settled question: the use of NWPs for the WWTP and the force main and outfall separately from the TC Interceptor, the latter to follow the individual permit regime.

E. The County's Position as of November 30, 1999

Accordingly, on November 30, 1999, Harksen, accepting Knepper's invitation of November 10, submitted the County's position statement to the Corps. R590- 94. In that letter, Harksen described the "permitting approach" to which he believed the Corps had agreed at the July 14 meeting, which had led the County formally to request NWP permit verification on August 23 (for the WWTP) and September 28 (for the force main and outfall) R590. The letter also explained why the County had presented all components at the July 14 meeting and set forth the County's belief regarding the outcome of that meeting:

> The County's three projects, the Totopotomoy Wastewater Treatment Plant, the discharge force main and outfall structure, and gravity sewer interceptor were presented to the agencies to provide the "big picture" of the County's plans so that an appropriate permitting plan could be developed for the projects. *Following the presentation, appropriate permitting strategies were* discussed and *agreed to.* We believe *we have been proceeding with the permitting approach agreed to* at the July meeting.

R590 (emphasis added). The November 30 statement of position also asserts that the phase of the TC Interceptor that is here at issue "is part of a long-term, stand alone project

and was planned and started long before the location for the wastewater treatment plant was selected. The concept for the Totopotomoy interceptor appeared in a 1979 report and possibly earlier reports." R592. The letter further states that the final phase of the TC Interceptor will be built without regard to whether the WWTP is built at the proposed site, but the flow currently being sent to Henrico County "would need to be conveyed to wherever additional treatment capacity is made available. The County is proposing that this additional capacity be located at the site of the proposed Totopotomoy Wastewater Treatment Plant, a location that works well with the proposed interceptor." R592.

The County's statement of position makes clear beyond peradventure that, as of November 30, 1999, the TC Interceptor is required to transport sewage to the new WWTP, wherever it might have been located. There was under consideration, at the time, only one possible location of the WWTP, the one at the terminus of the proposed TC Interceptor.

In assessing Harksen's references to the fact that the TC Interceptor was the last phase of the earlier project, it is important to note that, while the precise site of the WWTP may not have been selected in 1979 (the date when the interceptor line that contains the TC Interceptor appeared on the comprehensive plan), a WWTP in the general vicinity of the proposed WWTP had been part of the County's comprehensive plan since 1972. R426. In any event, the County studied alternative WWTP sites, found the current site of the proposed WWTP to be the best, and bought the land for it in 1997. R593. After that, the County began the final planning for the TC Interceptor to connect with a WWTP at that site and had finalized those plans by October 1998.

Harksen's letter also makes clear that, by November 30, 1999, the County was *889 very anxious about whether the Corps would adhere to the permitting approach the County thought had been settled upon in a private meeting with the Corps. That meeting was held before any member of the public had been given notice of what the County had in mind to assure that it could proceed under the soon-to-expire NWP 26. Remarkably, the Corps did not reply to Harksen that there had not been--in fact could not lawfully have been--any agreement at all on July 14. [FN7]

> FN7. The Corps could lawfully suggest possible approaches to permitting, 33 C.F.R. § 325.1(b), but that is not tantamount to an agreement.

Further, it should be noted that Harksen's letter seeks to make the point that the TC Interceptor has independent utility without the WWTP. But, as will be explained later, the issue is whether the WWTP has independent utility without the TC Interceptor. Nothing in Harksen's letter or the record as of November 30, 1999 permits any such conclusion.

F. The Meeting on January 7, 2000, the Letter of January 14, 2000, and the First Mention of the Powhite Creek Pump Station

On January 7, 2000, another meeting concerning the project was held between the Corps' Jones and Knepper and several representatives of the County. Handwritten notes (by an unidentified author) appear in the record at R728-29. These notes, under the heading of "Sloane," state "plant + outfall -> makes sense to be single, look @ interceptor as separate."

R729. It is not clear who took these notes, who made that statement, whether the Corps came to that conclusion, and, if so, why the Corps reached any such conclusion, if that is what it is.

Then, on January 14, 2000, the County submitted, "as a follow up to" the January 7 meeting, a joint pre-notification for the WWTP, force main, and outfall. R739-66. Specifically, the County sought a verification of the use of NWP 26 for the WWTP, NWP 12 for the force main, and NWP 7 for the outfall. R739. This consolidated pre-notification was tendered "to combine the previously separate permit verification requests" for the WWTP (August 23, 1999) and the force main and outfall (September 28, 1999). R739.

Also on January 14, 2000, Timmons wrote a separate "follow up" letter to the Corps respecting the January 7, 2000 meeting. The cover letter provides "additional information to assist the Corps of Engineers in making a determination as to the 'single and complete' project status for the Totopotomoy Wastewater Treatment Plant, the outfall force main, and the discharge structure." R767. It explains:

> As indicated at the meeting, and shown on the enclosed drawing, *there is clearly additional wastewater input to the proposed wastewater treatment plant other than the proposed Totopotomoy interceptor sewer.* The proposed Totopotomoy Wastewater Treatment Plant is being planned to meet the sewage disposal requirements for a large portion of the area referred to as the Suburban Services Area in the County's Comprehensive Plan. A majority of the portion of the Suburban Services Area that will be served by the Totopotomoy Wastewater Treatment Plant is not in the Totopotomoy Interceptor Sewer's drainage basin. *Sewage will be pumped either to the proposed [TC]*

interceptor sewer for conveyance to the wastewater treatment plant or pumped directly to the wastewater treatment. On the drawing of the Cold Harbor Service Area, both of these *options are shown for the pump over from the future Powhite Creek Pump Station. As currently planned* by the ***890** County, *this pump station* [the Powhite Creek Pump Station] will allow Hanover to off load additional flow from Henrico County to the Totopotomoy Wastewater Treatment Plant *in about the year 2017. Although the County is not planning to do so, the Powhite Creek Pump Station and force main could be constructed earlier* if required to convey wastewater directly to the Totopotomoy Wastewater Treatment Plant. R767-68 (emphasis added).

Thus, it was on January 14, 2000, after the notion of separating the TC Interceptor from the rest of the project was under attack and after the County thought that the Corps might be retrenching from the permit approach supposedly "agreed" on July 14, 1999, that the Powhite Creek Pump Station is mentioned as a source of "wastewater input to the proposed wastewater treatment plant." *Id.* Of greater significance than the belated entry of this "wastewater input" source (to explain why the WWTP has independent utility from the TC Interceptor) is the assertion that the WWTP, which the County needs to be operational by 2003, could receive wastewater from a pump station that is not planned to be operational until 2017.

At oral argument on April 3, 2001, counsel for the Corps explained that the County would not build the Powhite Creek Pump Station until it is necessary to do so to serve the so-called Cold Harbor Service area of the County and there is no plan to do that until 2017. Thus, as counsel for the Corps admitted at oral argument on April 3, if the Powhite Creek

Pump Station is a viable alternative source of sewage for the WWTP in 2003, it is not shown in the record.

G. The Emergence of Independent Utility

In a facsimile dated February 15, 2000 from the Corps to Rod Schwarm of the National Marine Fisheries Service, the Corps' Knepper first addressed the topic of independent utility, saying that "the proposed [Totopotomoy Wastewater Treatment Plant], effluent forcemain, and diffuser outfall are all considered a single and complete project because they have separate utility (tie in with *existing pump stations*)." R790 (emphasis added). However, the record does not identify any existing pump stations (as of February 15, 2000) that are "tied in," or that are planned to be "tied in," by an interceptor line through which the WWTP could receive sewage.

At oral argument on April 3, 2001, counsel for the County identified the existing pump stations to which Knepper was referring as those shown on the maps at R202-03 (Royal Glen, Berkeley Forest, and Avondale pump stations). Although these pump stations do exist, they would need to be linked to each other and to the WWTP by an interceptor in order to transport water to the WWTP. The record does not disclose any such interceptor now in existence or planned for 2003, if ever.

It is also interesting to note that others involved in the regulatory process recognized, from the submissions made to the Corps, that the WWTP, force main and outfall, and the TC Interceptor were all components of a project in which the components were dependent upon one another. For example, by letter dated March 23, 2000, the Virginia Department of Historic Resources, having reviewed the

County's plans, expressed the view that:

> [t]he wastewater treatment plant, force main, outfall structure, and sewer interceptor *are four components of one project.* Given our current understanding of the Corps involvement, it is reasonable to regard the *proposed activity as* ****891** one whole and complete project* for purposes of Section 106 of the National Historic Preservation Act.

R809. After a private meeting between it and the Virginia Department of Historic Resources, the County requested the Department to issue a letter retracting the independent assessment quoted above. R824. That letter was issued, but it was sent to Knepper of the Corps for review before the Department issued it. R824-26.

On May 4, 2000, the Corps responded to the March 23 opinion of the Virginia Department of Historic Resources, stating:

> In your letter you state that you consider the proposed wastewater treatment plant, force main, outfall structure, and sewer interceptor as four components of one project. You further state that you feel this should be considered a single project for purposes of Section 106 consultation. We disagree. Hanover County (County) has provided our office with information that demonstrates the proposed wastewater treatment plant, force main, and diffuser outfall have separate utility from the proposed sewer interceptor. The County has informed us that the proposed wastewater treatment plant, force main, and diffuser outfall would be constructed even if the proposed sewer interceptor is never permitted and constructed. In a meeting with County representatives on January 07, 2000 and in a letter from Timmons dated January 14, 2000, the project proponents demonstrated the proposed treatment plant, force main and outfall is designed to handle wastewater input from sources

> other than the proposed Totopotomoy interceptor (e.g., from the proposed Powhite Creek Pump Station). Considering this information, our office has determined the proposed wastewater treatment plant, force main, and diffuser outfall constitute a single and complete project; and the proposed sewer interceptor represents a separate single and complete project.

R838. In sum, in May 2000, the Corps acknowledged that its decision was based on whatever was said in a private meeting between it and the County on January 7, 2000 and on the contents of a letter dated January 14, 2000.

On June 7, 2000, the Corps issued a Memorandum for the Record respecting its authorization of NWPs for the WWTP, force main, and outfall. R864. The explanation for the Corps' decision, in its entirety, follows:

> Hanover County has provided our office with information that demonstrates the proposed wastewater treatment plant, force main, and diffuser outfall have separate utility from the proposed sewer interceptor. The County has informed us that these 3 elements would be constructed even if the proposed sewer interceptor is never permitted and constructed. In a meeting with County representatives on January 07, 2000 and in a letter from Timmons dated January 14, 2000, the project proponents demonstrated the proposed treatment plant, force main and outfall is designed to handle wastewater input from sources other than the proposed Totopotomoy interceptor (e.g., from the proposed Powhite Creek Pump Station).

R864. Like the Corps' letter of May 4, 2000, this Memorandum of the Corps' decision was based on the January 7 meeting and the January 14 letter from Timmons. Also, in both letters the Corps' decision identifies the proposed Powhite Creek Pump Station as the only source, other than the TC Interceptor, of sewage for the WWTP. This

passage (which appears in both letters) is the only statement in the Corps' official permitting decision about ***892** the relationship of the TC Interceptor to the WWTP, force main, and outfall.

On this record, Crutchfield and Broaddus seek a declaration that the Corps' verification of the NWPs for the outfall, force main, and WWTP, was contrary to law; a declaration that these NWPs are invalid and void; an injunction to prevent the County from proceeding with the WWTP until it receives an individual permit for the complete project; and attorneys fees, costs, and expenses.

DISCUSSION

I. Standard of Review

A district court shall "hold unlawful and set aside agency action, findings, and conclusions found to be ... arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2). Challenges to permitting actions by the Corps on CWA, NEPA and NHPA grounds are all subject to the deferential standard of review set out in the APA. *See Marsh v. Oregon Natural Resources Council,* 490 U.S. 360, 377, 109 S.Ct. 1851, 104 L.Ed.2d 377 (1989) (NEPA); *Morongo Band of Mission Indians v. Fed. Aviation Admin.,* 161 F.3d 569, 573 (9th Cir.1998) (NHPA); *Preserve Endangered Areas of Cobb's History, Inc. v. Corps of Engineers,* 87 F.3d 1242, 1247 (11th Cir.1996) (CWA); *Shoreline Assocs. v. Marsh,* 555 F.Supp. 169, 173 (D.Md.1983), *aff'd,* 725 F.2d 677 (4th Cir.1984) (same). The party asserting an APA challenge bears the burden of demonstrating that the agency's actions were arbitrary or capricious. *See, e.g., Sierra Club v. Marita,* 46 F.3d 606, 619 (7th Cir.1995).

The scope of this review "is narrow and a court is not to substitute its judgment for that of the agency." *Motor Vehicle Mfrs. Ass'n of the United States, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43, 103 S.Ct. 2856, 77 L.Ed.2d 443 (1983). In order to satisfy this review, "the agency must [have] examine[d] the relevant data and [have] articulate[d] a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.' " *Id.* (citation omitted). Although the reviewing court cannot supply the reasoned basis for the agency's action, the reviewing court is obligated to " 'uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned.' " *Id.* (citation omitted). Thus, the court's "task is to scrutinize the [agency's] activity to determine whether the record reveals that a rational basis exists for its decision." *Natural Res. Defense Council, Inc. v. United States Environmental Protection Agency,* 16 F.3d 1395, 1401 (4th cir.1993). If so, the court must uphold the agency's action. Finally, the agency's decisions are due deference by the judiciary in the interpretation of the statutes that the agency administers, in the interpretation of its own regulations, and in the area of its expertise. *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984); *Christensen v. Harris Co.*, 529 U.S. 576, 120 S.Ct. 1655, 1662, 146 L.Ed.2d 621 (2000).

II. Issues Presented For Review

Broaddus and Crutchfield present three basic issues for judicial review. They are:

(1) Whether the Corps violated the Clean Water Act and its own regulations when it accepted NWP verification requests and later confirmed nationwide permit coverage for discharges associated with construction of the

Totopotomoy sewage treatment plant, discharge forcemain, and outfall structure and diffuser, but ignored related activities requiring ***893** Corps authorization associated with the proposed interceptor sewer.
(2) Whether the Corps' action also violated the National Environmental Policy Act when it verified NWPs for portions of this project without preparing an EA or EIS addressing all of the effects of, and alternatives to, the overall project.
(3) Whether the Corps violated the National Historic Preservation Act when it issued NWPs for portions of this project without considering all of the impacts the overall project may have on historic resources.

III. Analysis

The challenge under each statute will be examined in turn. However, as a practical matter, the analysis under NEPA and NHPA are dependent upon the validity of the Corps' actions under the CWA, so those issues must be addressed first.

A. The Clean Water Act Issues

The challenge under the CWA implicates two regulations issued by the Corps in respect of duties entrusted to it under the CWA. The Plaintiffs' argument under 33 C.F.R. § 325.1(d)(2) misses the mark. However, their positions respecting the Corps' failure to satisfy 33 C.F.R. § 330.6(d) are well- taken.

1. The "Reasonably Related" Requirement of 33 C.F.R. § 325.1 Does Not Apply to NWPs

The first issue to be addressed under the CWA is whether the Corps violated the requirements of its own regulation, 33

C.F.R. § 325.1(d)(2), respecting the verification of permits by improperly allowing the County to present the joint pre-notification for NWPs for the WWTP, force main and outfall and an individual permit application for the TC Interceptor in different documents, thereby dividing one project of related components into two different projects. Assessment of that issue requires a brief consideration of the Corps' regulations respecting the verification of permits of the sort here at issue.

The objective of Chapter 26 of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a) The Secretary of the Army, acting through the Chief of Engineers:

> [i]n carrying out his functions relating to the discharge of dredged or fill material under this section ... may, after notice and opportunity for public hearing, issue general permits on a State, regional, or nationwide basis for any category of activities involving discharges of dredged or fill material if the Secretary determines that the activities in such category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment.

33 U.S.C. § 1344(e)(1). Under the CWA, the Corps has established two mechanisms to authorize the conduct of activities that affect waters of the United States: individual permits and general permits. *See* 33 C.F.R. § 325.5. The Corps issues individual permits after reviewing applications. "Individual permit" means "a DA authorization that is issued following a case- by-case evaluation of a specific structure or work in accordance with the procedures of this regulation and 33 CFR part 325, and a determination that the proposed structure or work is in the public interest pursuant to 33 CFR part 320." 33 C.F.R. § 322.2(e). The Corps also may issue

general permits "that authorize a category or categories of activities in specific geographical regions or nationwide." 33 C.F.R. § 320.1(c); *see also* 33 C.F.R. § 322.2(f).

***894** General permits can be either nationwide, which are issued by the Chief of Engineers through publication in the Federal Register and apply nationwide, or regional, which are issued by district or division engineers and apply only in a given region. 33 C.F.R. § 320 .1(c). Nationwide permits (NWPs), the sort authorized for the County and at issue here, are nationwide general permits that "are designed to regulate with little, if any, delay or paperwork certain activities having minimal impacts." 33 C.F.R. § 330.1(b). At the risk of oversimplification, NWPs are issued to allow conduct of a class of activities that the Corps has studied that, either because of the nature of the activity or the small reach of its impact, have sufficiently minimal impact as to justify bypassing the stricter regulatory review given applications for individual permits.

In contrast, standard individual permits require compliance with "public interest review procedures, including public notice and receipt of comments." 33 C.F.R. § 325.5(b)(1). This public interest review involves an evaluation of "the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work." 33 C.F.R. § 320.4(a)(2)(ii).

Some activities that are authorized by general permits, including NWPs, do not require an application or even prior notification to the Corps before the activity is begun. 33 C.F.R. § 330.1(e). Others require pre-notification before initiating construction, but "[t]he permittee may presume that his project qualifies for the NWP unless he is otherwise notified by the DE within a 30-day period." *Id.; see also* 33

C.F.R. § 320.1(c). In others, "[n]ationwide permittees may, and in some cases must, request from a DE confirmation that an activity complies with the terms and conditions of an NWP." 33 C.F.R. § 330.6(a). Approval of that sort is termed a "verification," *id.*, and it is the Corps' verification of the County's permits that is the subject of this action.

That brings us to the first regulation at issue, 33 C.F.R. § 325.1(d)(2), which provides:

> All activities which the applicant plans to undertake which are *reasonably related* to the same project and for which a DA permit would be required should be included in the same permit application. District engineers should reject, as incomplete, any permit application which fails to comply with this requirement.

33 C.F.R. § 325.1(d)(2) (emphasis added). The threshold issue raised by Crutchfield and Broaddus is whether the "reasonably related" requirement in section 325.1(d)(2) applies to NWPs of the sort that, like those here at issue, require pre-notification. For the reasons set forth below, the "reasonably related" requirement does not apply to such NWPs.

Section 325.1 begins by explaining that "[t]he processing procedure of this part apply to *any* Department of the Army (DA) permit. Special procedures and additional information are contained in 33 CFR parts 320 through 324, 327 and part 330. This part is arranged in the basic timing sequence used by the Corps of Engineers in processing applications for DA permits." 33 C.F.R. § 325.1(a) (emphasis added). Although this provision clearly makes section 325.1 applicable to "processing applications" for all permits, it does not govern the verification of NWPs because NWPs do not require applications within the meaning of section 325.1(d). 33 C.F.R. § 320 .1(c). Some NWPs, as is the case here, require

what the regulations term "pre-notification" to the Corps of the proposed activity. The procedures for pre-notification are set forth in 33 C.F.R. § 330.1(e), which refers to this requirement ***895** as "notification" rather than an "application."

The information in section 325.1(c), "Application form," applies to "individual DA permits" and explains that "[c]ertain activities have been authorized by general permits and do not require submission of an application form but may require a separate notification." 33 C.F.R. § 325.1(c). Immediately following, section 325.1(d), which contains the "reasonably related requirement," gives information on the "Content of application." Read in the context of section 325.1 and section 330.1, the "reasonably related" requirement of section 325.1(d) applies only to applications for individual permits, not to notifications of NWPs. [FN8]

> FN8. It should be noted that, on various occasions, the County termed its requests for verification under the NWPs here at issue as "verifications," "applications," or "joint applications." R424, 463, 498, 739. However, notwithstanding the use of the word "application" as captions for some of its requests for the Corps to allow it to proceed under NWPs 26, 12 and 7, the record establishes that both the Corps and the County were proceeding under the regulations respecting NWPs of the type that require Corps verification which, as explained above, are not governed by the reasonably related requirement of section 325.1(d).
> If that requirement were applicable, the Corps' handling of this matter would have violated the reasonably related requirement for the same reasons

that the Corps violated the independent utility requirement of section 330.6(d).

2. NWPs Fail Independent Utility Analysis of 33 C.F.R. § 330.6

The Plaintiffs' next challenge to the action of the Corps is that the verification of the NWPs was in violation of 33 C.F.R. § 330.6(d), "Combining nationwide permits with individual permits." That regulation provides:

> Subject to the following qualifications, *portions of a larger project may proceed under the authority of the NWPs while the DE evaluates an individual permit application for other portions of the same project, but only if the portions of the project qualifying for NWP authorization would have independent utility and are able to function or meet their purpose independent of the total project.* When the functioning or usefulness of a portion of the total project qualifying for an NWP is *dependent on the remainder of the project, such that its construction and use would not be fully justified even if the Corps were to deny the individual permit,* the NWP does not apply and all portions of the project must be evaluated as part of the individual permit process.

33 C.F.R. § 330.6(d) (emphasis added). The regulation further states:

> When a portion of a larger project is authorized to proceed under an NWP, it is with the understanding that its construction will in no way prejudice the decision on the individual permit for the rest of the project. Furthermore, the individual permit documentation must include an analysis of the impacts of the entire project, including related activities authorized by NWP.

33 C.F.R. § 330.6(d)(1).

Crutchfield and Broaddus challenge the Corps' decision under this regulation on two grounds. First, they argue that the WWTP, force main, and outfall do not have utility independent of the TC Interceptor, and therefore can be permitted, if at all, only through an individual permit rather than through an NWP. [FN9] Second, ***896** Crutchfield and Broaddus argue that the NWPs for the WWTP, force main, and outfall were allowed to proceed before the Corps received an individual permit application for the TC Interceptor, not "while" the Corps evaluated the individual permit application that the County made for the TC Interceptor after the Corps verified the use of NWPs for the WWTP, force main and outfall. Therefore, say the Plaintiffs, even if the WWTP, force main, and outfall had independent utility, they could not lawfully have received NWP verification until the County had submitted an individual permit application for the TC Interceptor. For the reasons set forth below, both arguments are meritorious. [FN10]

FN9. Of course, if an individual permit is required, then the "reasonably related" requirement of 33 C.F.R. § 325.1 would be applicable. *See supra* section III(A)(1).

FN10. The County argues that the WWTP, force main, and outfall are a "single and complete project" that can go forward under two or more different NWPs pursuant to 33 C.F.R. § 330.6(c). County's Pre-hearing Memorandum at 12-15. This argument fails for the reasons set forth in section III(A)(2)(a) regarding the lack of independent utility of these three components of the project.

a. The WWTP, Force Main, and Outfall Lack Utility Independent of the Totopotomoy Creek Interceptor

The parties have cited, and research has unearthed, no precedent interpreting the "independent utility" requirement of 33 C.F.R. § 330.6(d). However, the plain text of the regulation, as applied to the record, rather clearly forecloses a rational determination that the WWTP, force main, and outfall have utility independent of the TC Interceptor.

To begin, it is important to note that the regulation requires that the portions of the project sought to be authorized under an NWP (here the WWTP, force main and outfall) be "able to function or meet their purpose independent of the total project." 33 C.F.R. § 330.6(d). The undisputed record here is that the WWTP cannot function at all unless sewage is transported to it by an interceptor. It is also undisputed that the force main and outfall have no function without the WWTP. Thus, an interceptor is the linchpin of functionality and utility for the WWTP, the force main and the outfall. The record is also undisputed that the WWTP is to be, indeed must be, operational in 2003 to meet the County's wastewater treatment needs. And, the only interceptor even now planned for operation in 2003 is the TC Interceptor.

Nonetheless, the Corps authorized the County to proceed on the WWTP, force main, and outfall under NWPs based on the irrational conclusion that they could function apart from the TC Interceptor and had independent utility because the County's plans showed another interceptor (the Powhite Creek Pump Station line) that could supply sewage to the WWTP when--and if--that interceptor was built in 2017. For several reasons, that decision cannot be considered a

rational one supported by the record.

First, that rationale is at odds with the undisputed facts that: (1) according to the County, the WWTP, force main and outfall must be operational in 2003; and (2) the Powhite Creek Pump Station interceptor line is not scheduled to go online until 2017, if then.

Although that schedule might be advanced, the County told the Corps that there is no plan to do so. Moreover, given the County's plan to construct the TC Interceptor, there was, on June 7, 2000, no likelihood of constructing the Powhite Creek Pump Station line until 2017, the earliest date shown in the County's growth projections and planning documents. That, of course, assumes that those growth projects are realized. In sum, the Corps ***897** reasoned that, during the 14 year period after 2003, the WWTP and the force main and outfall would have independent utility even though, during that period, no sewage whatsoever would be supplied to the WWTP, except through the TC Interceptor. That, of course, also means that, during those 14 years, nothing would be discharged from the WWTP. That reasoning simply is not rational.

Second, that rationale is inconsistent with the record as a whole. The record shows that, for many years, the County's comprehensive plan and its detailed plans for the construction of the WWTP, force main and outfall, all of which are to be operational in 2003, have been premised on the relationship between the WWTP and the TC Interceptor. Not one mention of transporting sewage to the WWTP by the Powhite line appears in the record until January 14, 2000, after opposition to the permitting approached here at issue was made by Crutchfield, Broaddus and others. R767-68. That alternative was not even mentioned in July 1999 when

the County and the Corps appear to have perceived the need to segment the TC Interceptor from the rest of the project in an effort to qualify as much of the project as possible under the NWP program. Nor was it mentioned at any time throughout the permitting adjustments made in the fall once the Plaintiffs had learned of the permitting approach and then opposed it.

Of course, the mere fact that the TC Interceptor has been the long-planned means of conferring functionality and utility upon the WWTP does not mean that no other alternative could achieve those ends. However, the County's long-standing reliance on the TC Interceptor and the fact that it is part of the County's comprehensive plan and has been the subject of detailed design as the mode of sewage transport to the WWTP renders incredible the belated resort to the theory that the Powhite line could be the basis for a rational conclusion of independent utility. The Corps' determination is, on this record, shown to be a belated contrivance of expediency.

The irrationality of pinning the independent utility finding on the Powhite line is further illustrated by the sequence of events leading to the Corps' determination. Specifically, in July 1999, neither the Corps nor the County approached the permitting analysis by considering independent utility. Rather, both looked at whether the projects could be separated; and that approach was driven by the fact that the Corps told the County that the TC Interceptor, which had a more than minimal impact, could not proceed under an NWP.

Then, in an effort to prove separateness, the County offered--in the Harksen letter of November 30--a justification that tended to show that the TC Interceptor had independent

utility from the WWTP, not vice versa as the regulation requires. 33 C.F.R. § 360.6(d) (emphasis added) (portions of a larger project may proceed under NWPs "*only if the portions of the project qualifying for NWP authorization* would have independent utility and are able to function or meet their purpose independent of the total project"). For reasons neither expressed nor readily apparent, the separateness approach was abandoned in January 2000 and the independent utility approach surfaced for the first time. Only then did the County mention the Powhite Creek Pump Station.

Third, the Corps' determination is at odds with reality. Specifically, it is undisputed that the County actually intends to build the TC Interceptor by 2003 as the means of providing sewage to the WWTP when it becomes operational. The record shows that, at all times after July 14, the ***898** County intended to apply for a permit for the TC Interceptor shortly after the NWPs for the WWTP, force main and outfall were verified by the Corps. Although not part of the administrative record in this action, according to Plaintiffs, the Corps received the County's individual permit application for the TC Interceptor on July 17, 2000, shortly after the Corps verified NWPs for the other components of the sewage system on June 7, 2000. Plaintiff's Pre-hearing Memorandum at 13-14. That is not disputed by the County.

All of that was known to the Corps when it based its independent utility determination for those components on the fact that the Powhite line was to be built in 17 years. These facts of record further illustrate that the Corps' independent utility finding is an expedient adopted by the Corps at the urging of the County largely because NWP 26 was on the verge of expiring, and, as the record shows, the County urgently needed to take advantage of it.

That conclusion is underscored by the evolution of the permitting process from shortly after the Pre-Application Package was filed on June 3, 1999. In fact, the Corps appears to have had doubts from as early as June 1999 that the NWP process would be available to the project as the County had planned. The reason is obvious. The TC Interceptor was foreseen to have more than minimal impacts which, of course, would foreclose use of NWPs for the entire project. Thus, another approach had to be devised. The County and the Corps settled on the idea of separating the projects, apparently in July 1999 (or so the County thought). Crutchfield and Broaddus found out about this plan and complained that the WWTP, force main and outfall could not be logically or legally separate from the source of supply--the TC Interceptor for which at the time there was no proposed alternative. Broaddus and Crutchfield then formally objected to the piecemealing.

There then arose a need to find an alternative method of transporting wastewater to the WWTP. For reasons neither expressed nor readily apparent, the County posited the Powhite line in an undocumented meeting on January 7, 2000 and in a letter dated January 14, 2000. Citing that, and only that, as its basis, the Corps made its finding of independent utility. R864, Memorandum for the Record ("the project proponents have demonstrated the proposed treatment plant, force main, and outfall is designed to handle wastewater input from sources other than the proposed Totopotomoy interceptor (e.g., from the proposed Powhite Creek Pump Station)"). [FN11]

FN11. Interestingly enough, three months later, a state agency, the Virginia Department of Historic Preservation, reached the conclusion that this was a

> single project with four components, but that agency was backed off that conclusion as a result of the joint activity of the County and the Corps. But, the die had been cast in January insofar as the Corps was concerned, and it could not brook a different conclusion by a different agency.

Significantly, however, in February 2000, the Corps authored a document that shows that its decision in January was wrong. Specifically, on February 15, 2000, the Corps told another federal agency that "[t]he proposed [WWTP], effluent forcemain and diffuser outfall are all considered a single and complete project because they have separate utility (*tie in with existing pump stations*)." R790 (emphasis added). There is, in the record, no support for such a finding, given that the WWTP was not "tied in" with existing pump stations and that there were no plans to build the Powhite Pump Station line until 2017. Although ***899** the County stated that it could construct the Powhite Creek Pump Station earlier, the administrative record contains no indication that the County planned to accelerate construction of the Powhite Creek Pump Station or, if the County did, how early the Powhite Creek Pump Station could be operational. The County did not represent that the Powhite Creek Pump Station could be constructed early enough for the WWTP to be operational by 2003, or even soon thereafter. Thus, the February 15 document illustrated that the factual predicate for the Corps' independent utility determination (based on the January 7 meeting and the January 14 letter) was incorrect.

However, by May 4, 2000, in its response to the Virginia Department of Historic Resources, the Corps took the view that independent utility was supplied by the Powhite Creek

Pump Station, which was not planned to be operational for 17 years. R838. The Corps' June 7 Memorandum of Record takes the same tack. R864.

Fourth, the Corps' determination that the WWTP, force main and outfall have independent utility from the TC Interceptor suffers from another infirmity. Specifically, that determination is not supported by articulated reasoning for the Corps' conclusion that the Powhite Creek Pump Station, which is not to be built until 2017, can be the source of supply for the WWTP, which must be operational in 2003.

According to the record, that critical determination was made by the Corps because, in a meeting on January 7 and in a letter on January 14, the County "demonstrated the proposed treatment plant, force main and outfall is designed to handle wastewater input from sources other than the proposed Totopotomoy interceptor (e.g. from the proposed Powhite Creek Pump Station)." R864. However, nowhere does the Corps explain how that "demonstration" took place or what the Corps relied on in making the remarkably illogical conclusion that a sewage treatment plant to be operational in 2003 could derive independent utility from a source of supply to be built in 2017, if then.

It is axiomatic that the Corps is obligated to provide reasoning to support its determination of independent utility. That is especially important where, as here, the determination is, on its face, of doubtful rationality. Of course, the Court is obligated to uphold " 'a decision of less than ideal clarity if the agency's path may reasonably be discerned,' " *State Farm Mut. Auto. Ins. Co.*, 463 U.S. at 43, 103 S.Ct. 2856, but that precept does not apply here because the Corps' decisional path is not discernable.

For example, how and why did the Corps surmount the illogic of a rationale that is so facially illogical? Did the Corps consider that independent utility is, under its regulation determined, solely by looking at the project's design and ignoring the rest of the record on the critical connectivity between the TC Interceptor and the WWTP that must be operational in 2003. These are but two issues that call out for explanation. But, the Corps has given none.

The need for agency explanation is especially important considering that nothing in the record discloses what was said on the critical topic at the January 7 meeting except the terse notation made by an unknown author and that the January 14 letter is itself an irrational explanation of independent utility (confessing, as it does, that there are no plans to build the putative alternate source of supply until 2017).

The articulation of the Corps' reasoning is of utmost importance particularly in the process followed by the Corps which encourages ***900** private resolution of the details respecting matters of public importance. Of course, that process is not challenged here and it appears to be consistent with a well-publicized regulatory program. Nonetheless, the regulated party and the regulator are not the only interested parties in respect of these decisions. Thus, if what is said behind closed doors is convincing to the regulator, it is obliged to set forth clearly and cogently its reasoning when it makes its decision public. Nowhere is that more important than where, as here, the logic of the decision is so difficult to discern and where the decision is such a drastic departure from long-standing plans and from reality.

Under these circumstances, the agency must articulate why it has made its decision with sufficient clarity that others

affected by the decision and the Courts can understand it. The Corps has not done that and its determination of independent utility cannot stand for that additional reason.

Finally, the so-called "capacity" argument made by the Corps and the County is unpersuasive. According to that theory, the WWTP is planned so that its capacity can be expanded from 5 mgd to 30 mgd if required, while the TC Interceptor was "designed with a nominal capacity of approximately 15 mgd." R426-27. Thus, ultimately, the capacity of the WWTP may exceed the capacity of the TC Interceptor. Hence, say the County and the Corps, the WWTP has utility independent of the TC Interceptor.

This argument for ascribing independent utility to the WWTP, force main, and outfall fails in the first instance because it was not a reason given by the Corps for its determination. Hence, it is a classic post-hoc rationalization of counsel which provides no ground for supporting the agency's decision.

Moreover, it does not logically support the agency's determination, even if it could be ascribed to the agency. While the WWTP may theoretically be capable of handling wastewater input from other sources, that fact alone does not give the WWTP, force main, and outfall independent utility at the time of verification of the NWPs. First, the initial capacity of the WWTP is smaller than that of the TC Interceptor, and its capacity may never be increased to 30 mgd. Second, designing the WWTP to receive sewage from other sources does not give it independent utility at the outset when there is no concrete plan to utilize other sources of transport in the near future, if at all. Hence, the argument that the WWTP is designed to handle sewage from sources other than the TC Interceptor also fails.

For the reasons explained above, the Corps' finding of independent utility is not a rational one. It cannot withstand even the deferential review to which it is entitled.

This result, based on application of the plain text of section 330.6(d) to the record, is supported by decisions which address analogous issues under other statutes. These cases address "segmenting" or "piecemealing," which refer to "an attempt by an agency to divide artificially a 'major Federal action' into smaller components to escape the application of NEPA to some of its segments." *Save Barton Creek Ass'n v. Fed. Highway Admin.*, 950 F.2d 1129, 1140 (5th Cir.1992). Case law on improper segmentation "almost always involves a situation where a 'major Federal action' is found to exist and *then* the segmentation is evaluated as an escape from NEPA application which is otherwise immediate." [FN12] *Id.* at 1139.

FN12. Segmentation and the scope of a project are threads that run throughout NEPA, CWA, and NHPA regulations. For example, CWA regulations addressing compliance with NEPA recognize:
In some situations, a permit applicant may propose to conduct a specific activity requiring a Department of the Army (DA) permit (e.g., construction of a pier in a navigable water of the United States) which is merely one component of a larger project (e.g., construction of an oil refinery on an upland area). The district engineer should establish the scope of the NEPA document (e.g., the EA or EIS) to address the impacts of the specific activity requiring a DA permit and those portions of the entire project over which the district engineer has sufficient control and responsibility to warrant Federal review.

33 C.F.R. § 325, Appendix B(7)(b).

***901** In an unpublished opinion, the Fourth Circuit addressed a NEPA claim regarding an EIS for a highway, a portion of which was to serve as a research and testing subject for Intelligent Transportation Systems. In it, the Fourth Circuit explained how to identify segmentation:

> The hallmarks of segmentation are where the proposed component action has *little or no independent utility or* involves such a large and irretrievable commitment of resources that it may virtually force a larger or related project to go forward notwithstanding the environmental consequences.

New River Valley Greens v. United States Dep't of Transp., 161 F.3d 3, 1998 WL 633959, *3 (4th Cir.1998) (unpublished opinion) (emphasis added).

Cases involving highways provide helpful analogies to this project. In fact, the County pressed the use of such analogies at oral argument. The analysis of Fourth Circuit precedent respecting highways and the distinctions between highways and the wastewater treatment project lead to the conclusion that the TC Interceptor was improperly segmented from the rest of the project. [FN13] The critical distinction between this sewage treatment project and connecting highways is that the WWTP has no source of water for 14 years without the TC Interceptor, while highways that physically connect nevertheless have sources of traffic other than any given highway to which they connect.

FN13. *See also Save Barton Creek Ass'n,* 950 F.2d 1129 (finding southern extension of a north-south

> freeway and a southwest corridor of circumferential freeway had independent utility because each served a significant purpose even if the other was not built, distinguishing precedent in which one segment could not be utilized if the other was not built).

For example, the Fourth Circuit was faced with the issue of whether I- 195 and the Downtown Expressway in Richmond, Virginia, were one project in a challenge to their construction under NEPA, NHPA, and the Federal-Aid Highways Act. The district court opinion, on the basis of which the Fourth Circuit affirmed the district court's decision, looked to:

> a multitude of factors, including the manner in which the roads were planned, their geographic locations, and the utility of each in the absence of the other. Any acts of the defendants that suggest that they may have decided to treat the roads separately in order to avoid the requirements of federal law will weigh very heavily in support of the project splitting theory. As to weighing the utility of each road in the absence of the other, the Court notes that it does not sit as a traffic expert to determine when one will be efficient if the other is not built. However, if the Court concludes that the two highways each have such little value in their own right that their separate construction could be considered arbitrary or irrational, the Court will find them to be a single project.

James River v. Richmond Metro. Auth., 359 F.Supp. 611, 635 (E.D.Va.1973), *aff'd* ***902** 481 F.2d 1280 (4th Cir.1973). The Court of Appeals found that the two highways reflected "both geographic differences and varying traffic needs," even though they were designed with the other in mind to maximize efficiency. *Id.* Moreover, each "serve rational needs in their own rights, apart from traffic feeding from one another." *Id.*

In this case, the WWTP, force main, and outfall serve no rational need in their own right without the TC Interceptor. Although the County has pointed to the proposed Powhite Creek Pump Station line as an alternative source of wastewater, there is nothing in the record to explain how construction of the WWTP is rational if it were to have no source of water until 2017, when the County has decried for years that the WWTP needs to be operational by 2003. The facts of this action are closer to an "unusual situation" in which roads are so interrelated that they would be treated as one highway:

> In some situations the relationship of several roads or parts of road may be so interrelated that no one road or part of a road can function as an efficient carrier of motor vehicles except in conjunction with the others. In such a case, it is possible that it would be necessary to have an EIS which would have as its subject all of the roads or parts of roads which could only function efficiently as a unit. In such an unusual situation, the several roads would not constitute a system of highways but would be treated essentially as a single highway for the purpose of the EIS.

Movement Against Destruction v. Volpe, 361 F.Supp. 1360, 1384 (D.Md.1973), *aff'd* 500 F.2d 29 (4th Cir.1974).

The County analogizes the WWTP, force main, and outfall to the circumferential highway around Washington, D.C., I-495, which it argues has utility independent of the major interstate highways that intersect it. I-495 clearly has independent utility because it serves to carry traffic around Washington, D.C., not just onto major interstate highways that leave the Washington area. But the WWTP, force main, and outfall are analogous to a circumferential highway that has no entry ramps, so that no vehicles can travel it unless entry ramps are constructed.

The proper highway analogy to the sewage treatment project at issue here is a highway that had no source of traffic for 14 years after it is built without the construction of the other road that is alleged to have been segmented from it. The Corps and the County have cited no such analogous case. Rather, they rely on the proposed Powhite Creek Pump Station, which is slated to be operational in 2017, to give the WWTP, force main, and outfall independent utility. Reliance on this source of wastewater for the WWTP does not make this case analogous to roads that have an immediate or impending source of traffic other than the road that is allegedly segmented.

The Corps cites *Northwest Resource Information Center, Inc. v. National Marine Fisheries Service,* 56 F.3d 1060 (9th Cir.1995), for the proposition that proposed actions are not necessarily interdependent because one would maximize the benefits of the other. Pre-hearing Memorandum of Corps at 21. That argument misstates the relationship between the WWTP and TC Interceptor. In *Northwest Resource Information Center,* the Ninth Circuit gleaned principles on "connected actions" from its precedents. *See also Wetlands Action Network v. United States Army Corps of Eng'rs,* 222 F.3d 1105 (9th Cir.2000). As the court explained, it has found that two actions are inextricably intertwined when, in the context of a road to facilitate logging, " 'timber sales cannot ***903** proceed without the road, and the road would not be built but for the contemplated timber sales.' " *Northwest Res. Info. Ctr.,* 56 F.3d at 1068, citing *Thomas v. Peterson,* 753 F.2d 754, 758 (9th Cir.1985). In contrast, when a golf course and proposed resort could exist without each other, although each would be enhanced by the other, they were not connected within the meaning of NEPA regulations. *Id.,* citing *Sylvester v. United States Army Corps of Eng'rs,* 884 F.2d 394, 400 (9th Cir.1989). The Ninth

Circuit concluded that "only when '[t]he dependency is such that it would be irrational, or at least unwise, to undertake the first phase if subsequent phases were not also undertaken[']" are the actions connected. *Id.*, citing *Trout Unlimited v. Morton,* 509 F.2d 1276, 1285 (9th Cir.1974). In this case, it is more than an understatement--it would be inaccurate--to say that the TC Interceptor and WWTP will enhance or maximize each other's benefit. Rather, the WWTP simply could not function at all in the County's time frame without the TC Interceptor. The WWTP will have no benefit for 14 years without the TC Interceptor, and the Corps has not articulated why it is not irrational, or at least unwise, to construct the WWTP without the TC Interceptor.

For the foregoing reasons, the WWTP and the associated force main and outfall are not "able to function or meet their purpose independent of the total project[,]" which, since the 1970s, has included the TC Interceptor. 33 C.F.R. § 330.6(d). The "functioning or usefulness" of the WWTP, force main, and outfall are "dependent on the remainder of the project," the TC Interceptor, "such that [their] construction and use would not be fully justified even if the Corps were to deny the individual permit." 33 C.F.R. 330.6(d). The Corps' decision to the contrary is arbitrary, capricious and not in accordance with law.

b. NWPs Fail Because They Were Not Verified While the Corps Evaluated An Individual Permit Application For the Interceptor

33 C.F.R. § 330.6(d) allows portions of a project having independent utility to proceed under an NWP while the Corps evaluates an individual permit application for the other portions of the project. At the time the Corps made its decision to verify the WWTP, force main and outfall under

NWPs, the County had not submitted an individual permit application for the TC Interceptor, even though that interceptor was included in the pre-application package. Thus, even if the WWTP, force main, and outfall have independent utility, Crutchfield and Broaddus argue, the NWPs were not verified by the Corps "while the DE evaluate[d] an individual permit application" for the TC Interceptor. The Corps argues that "while" simply means "prior to the Corps' final decision on the related individual permit application." Pre-hearing Memorandum of Corps at 24. Both the Corps and the County argue that any violation of the "while" requirement was harmless error because the Corps had information about the TC Interceptor, although no formal application had been made. *Id.* at 25; Pre- hearing Memorandum of County at 18-19. Significantly, neither the Corps nor the County argue that the "while" requirement was not violated because the WWTP, force main, and outfall are not a portion of a project that included the TC Interceptor.

The Corps relies on its explanation of this regulation contained in the Federal Register:

> There are many situations where a portion of an overall project that only involves adverse environmental effects ***904** covered by an NWP would be built (i.e., have independent utility) with or without associated activities that may require an individual permit. In such cases, it would be inequitable to delay a decision on the NWP pending a decision on the individual permit.

56 Fed.Reg. 59,110, 59,117 (Nov. 22, 1991). This passage does not re- write, or give the Corps the authority to re-write, the term "while" to be "prior to the Corps' final decision on the related individual permit application." The Corps and the County concede that the Corps verified the NWPs before the County even submitted an individual permit application for the TC Interceptor, and, by a plain reading of the text of

the regulation, the Corps failed to comply with it. Moreover, the statement cited to mitigate this failure, that it would be inequitable to delay an NWP decision, is qualified by the phrase "in such cases," i.e., when that portion of the project has independent utility from the subject of the individual permit application. Because, as determined above, the WWTP, force main, and outfall do not have independent utility from the TC Interceptor, verification of the NWPs was not harmless error.

B. National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA)

The preceding independent utility analysis demonstrates that the Corps erred in its application of 33 C.F.R. § 330.6(d) to the verification of NWPs for the WWTP, force main, and outfall. As a result, the Corps did not reach the analyses required under NEPA and NHPA.

1. NEPA

Under NEPA, all federal agencies shall:

> include in every recommendation or report on ... *major Federal actions significantly affecting the quality of the human environment,* a detailed statement by the responsible official on--
> (i) the environmental impact of the proposed action,
> (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
> (iii) alternatives to the proposed action,
> (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
> (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action

should it be implemented.

42 U.S.C. § 4332(C). The term "significantly" "requires considerations of both context and intensity." 40 C.F.R. § 1508.27. This includes:

> Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it into small component parts.

40 C.F.R. § 1508.27(b)(7).

The Corps did not consider the TC Interceptor in determining whether an environmental assessment or environmental impact statement were required by NEPA and, as a result, apparently found that the WWTP, force main, and outfall were not a "major federal action." [FN14] On remand, the ***905** Corps must consider whether the entire wastewater treatment system, including the WWTP, force main, outfall, and TC Interceptor, are a "major federal action," and, if so, fulfill the requirements of NEPA and its implementing regulations.

> FN14. The Corps conducts the environmental analysis required under NEPA for NWPs prior to the issuance of the NWP in the Federal Register, rather than in connection with verification of NWPs for a given project. R876-77, copy of 61 Fed.Reg. 65,874, 65,878-79 (Dec. 13, 1996).

2. NHPA

Under the NHPA:

> the head of any Federal department or independent agency having authority to license any undertaking shall, ... prior to the issuance of any license, ... take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation established under part B of this subchapter a reasonable opportunity to comment with regard to such undertaking.

16 U.S.C. § 470f. "No activity which may affect properties listed or properties eligible for listing in the National Register of Historic Places [ ] is authorized" under an NWP until the procedural provisions of 33 C.F.R. § 325, Appendix C, are satisfied. 33 C.F.R. § 330.4(g).

Under NHPA regulations, an agency official responsible for NEPA compliance must determine the area of potential effects of the undertaking and then take a series of steps to gather information on that area and evaluate whether the undertaking has an adverse impact on historical properties in it. 36 C.F.R. § 804.4(a). The "area of potential effects" is defined as follows:

> the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

36 C.F.R. § 800.16(d).

Because the TC Interceptor was not considered with the rest of the wastewater treatment project, the agency official did not consider the associated TC Interceptor in determining the

"area of potential effects" of the verification of the NWPs. The Virginia Department of Historic Resources initially regarded the TC Interceptor as part of the same project for purposes of NHPA, but, after consultation with the County and correspondence from the Corps, treated the interceptor as separate from the remainder of the project for NHPA purposes. R809-11, 824-26, 838-42, 860-61. As a result, the determination of "the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register" could not be properly made because the TC Interceptor was not considered part of the "undertaking." 16 U.S.C. § 470f. The Corps must now make that determination.

CONCLUSION

A review of the administrative record, applicable regulations, and decisional law lead to the conclusion that the authorization of NWPs for the WWTP, force main, and outfall by the Corps is arbitrary, capricious, and not in accordance with the law. The Corps "entirely failed to consider an important aspect of the problem," which is how the WWTP, force main, and outfall have utility independent from the TC Interceptor if they cannot be operational until 2017 without the TC Interceptor when the County has stated it requires ***906** them to be operational by 2003. *State Farm Mut. Auto. Ins. Co.,* 463 U.S. at 43, 103 S.Ct. 2856. The explanation for Corps' decision, that the WWTP has a source for wastewater other than the TC Interceptor, "runs counter to the evidence before the agency," which is that the WWTP would not be operational until 14 years after it was required (and planned) to be if the alternate Powhite Creek line is regarded as the sewage transport option. There is no rational basis for the Corps' explanation evident from the administrative record. *Id.*

The Corps is not required to conduct its own studies, *Friends of the Earth v. Hintz,* 800 F.2d 822, 834-35 (9th Cir.1986), and need not make extensive findings of fact in connection with verification of NWPs, *Orleans Audubon Society v. Lee,* 742 F.2d 901, 909-10 (5th Cir.1984). However, the agency must nevertheless independently evaluate information and "may not reflexively rubber stamp a statement prepared by others," *Save Our Wetlands, Inc. v. Sands,* 711 F.2d 634, 642 (5th Cir.1983), such as the statement that the WWTP, force main, and outfall have utility independent from the TC Interceptor.

For the foregoing reasons, the action of the Corps of Engineers verifying NWPs for the WWTP, force main, and outfall is set aside as arbitrary, capricious and not in accordance with law.

The Plaintiffs have asked for injunctive relief and attorneys' fees. The parties shall confer forthwith on the form of an order of injunction consistent with the requirements of this opinion and shall tender an agreed order by August 23, 2001 or shall, by that date, file memoranda explaining, with authority, their respective positions on the scope and wording of an injunction. Any replies shall be filed by August 27, 2001.

The Plaintiffs shall file a thoroughly documented application for attorneys' fees by September 4, 2001. The Defendants shall file a response by September 24, 2001 and the Plaintiffs shall file a reply by October 1, 2001.

The Clerk is directed to send a copy of this Memorandum Opinion to all counsel of record.

It is so ORDERED.

154 F.Supp.2d 878, 53 ERC 1761

END OF DOCUMENT